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An Address*

By

GENERAL SIR ROBERT MANSERGH, G.C.B., K.C.B., M.C.

INTRODUCTION BY GENERAL WEIBLE**

Colonel Green, Admiral Kern, distinguished guests, ladies and gentlemen: The gentleman who I am introducing has already been named to you; I am not going to tell you how old he is. As a matter of fact, I do not even know when he was born, but, like myself, he is one of the old retired "crocks" about whom it is said: we are too old to take "yes" for an answer.

Your speaker today is a gentleman of English-Irish parentage and in my personal opinion he has inherited the finest qualities of both. I am not going to tell you anything about his school years; he says that he was a poor scholar, but at the age of 17 he entered the Royal Military Academy and in two years he became a lieutenant of artillery and was sent to India. I am informed that in India his recreational activities were polo and big game hunting. After this service in India, he was transferred to the Middle East where five years of tough soldiering in mountain and desert campaigns gave him a great bit of experience and won him the Military Cross, one of the highest honors that has ever been conferred upon anyone in the Military in time of peace.

He returned to England to the Royal Military Academy as an instructor, which belies what he says about not being a very good scholar.

At the outbreak of World War II he had become a major and was sent to the Western Desert. The Division in which he was serving was sent to India and, when the Japanese invaded Burma, he found himself fighting one desperate battle after another through the Burma Campaign. When the time came for the counter-offensive, he had become a General commanding a Division, namely, the Fifth British Division. They smashed down through Mandalay to Toungoo and Rangoon.

After Burma he was sent with his Division to take over Singapore from the Japanese and then to the Netherlands East Indies. You can see that this gentleman has a very wide knowledge of some of the spots in the world that are called "trouble spots" today. In the East Indies, he was appointed Commander-in-Chief of all the Allied Forces, with the great task of restoring control in a command 3,000 miles long and containing a mixed population of 75 million people.

In 1947, he returned to England and for his outstanding services, not only on the field of battle but for the great part he played in restoring order in Indonesia, he was knighted by the late King George VI. Since then his appointments have included: Director of the Territorial Army, Military Secretary to the Secretary of State for War, and Commander-in-Chief at Hong Kong when the Communist forces swept China.

It was my good fortune to meet him in 1952 when he was commanding the land forces of the North of NATO. In 1953, he was made Commander-in-Chief of all the Allied Forces on the northern flank of NATO. One of the things I brag about is that I think I was instrumental in his being assigned to that responsible position.

In 1956, he returned to his homeland as Commander-in-Chief of the United Kingdom Land Forces and remained as such until his recent retirement. He now lives quietly, he says, near London.

It is not only a personal pleasure and a privilege for me, but also a high honor, to introduce to you a gentleman who I think represents the highest tradi-

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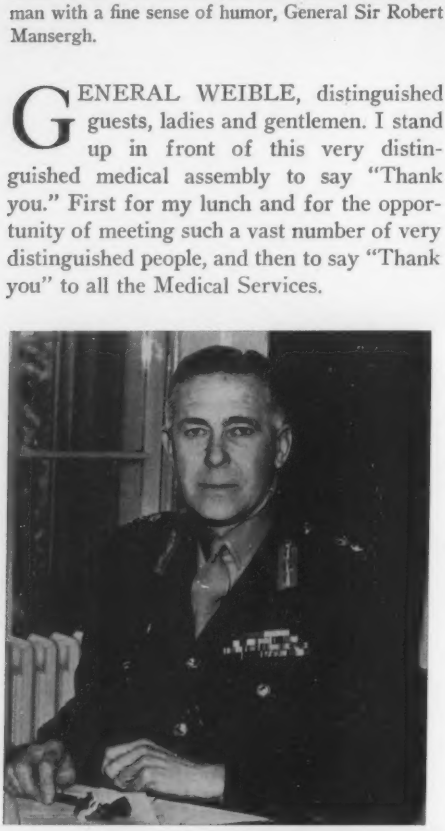
tions of the British Army, a warm friend, a gentleman with a fine sense of humor, General Sir Robert Mansergh.

GENERAL WEIBLE, distinguished guests, ladies and gentlemen. I stand up in front of this very distinguished medical assembly to say "Thank you." First for my lunch and for the opportunity of meeting such a vast number of very distinguished people, and then to say "Thank you" to all the Medical Services.



GENERAL SIR ROBERT MANSERGH

I would very humbly say it for myself because I lived in the jungle and have done all the things that chaps should and should not do in the jungle. However, I always took your "shots" and I swallowed your pills, and, quite honestly, I think I owe my ability to stand up and also not to wear a hat to the fact that I was an obedient officer to all your representatives.

Now very seriously, I want to thank the American Community whom I have never seen mentioned in any book or in any official writing and I cannot think why. I shall do it quickly but most sincerely. Those were the small groups, volunteer groups and official groups, who during the Burma War helped me and my Division when we were in times of trouble. I refer to a volunteer group of boys who drove jeep ambulances right up in mountains in the North. They kept our morale up, they saved our wounded, they brought us in. They were unarmed, they went through thick jungles, beastly jungle, water, mud, and everything that is there, and they carried our wounded out. The last people they thought of were themselves. Those boys did a wonderful job.

Then, also, when on the return trip down to Rangoon, at a time when we had to be very much on our toes, with partly trained jungle troops, and fighting hard, as our enemy of yesterday and we were rushing along at a rate of 65 to 70 miles a day, every single night after battle, light aircraft came and picked us up, regardless of rain or weather. In my Division I do not know of a single instance when those American boys failed to pick us up. Now to them—I have never seen them written up—so to them I say, "Thank you very much." Of course, in these modern times to say that L-5's came in and picked us up is just nothing; we have helicopters, we have every sort of thing, but at that time it was something quite wonderful.

May I now go to Korea? I happen to have had some soldiers from Hong Kong in Korea. In the early days the going was pretty rough before the Commonwealth Division was properly formed. I went to Korea and found that a new problem, a big problem, had come to us. I am now talking as a Commanding General. I now pose you a question which we soldiers, commanding soldiers, ask you doctors how to deal with. The problem was quite new; the press put it in banner headlines. They called it "brainwashing." It is something quite new, I believe. I have read books that have been written in America and at home stating that it is more correctly called "intensive indoctrination." That is more true. We soldiers, we commanders, will have that problem to deal with.

As an ordinary soldier I would say there must be good physical training; keep the

boys fit, keep them occupied; those are the best and surest ways. But that is not the entire answer; there is more to it than that. You know more about it probably than I do. There were instances of extreme cruelty, what we in Britain said was torture. The United States said, "No, it is not torture, it is a sort of rough treatment that combat troops might have to undergo." Therefore, they did not classify it as we did. We all had the problem. The soldiers discussed it with my doctors. The problem may come up again. It is an attempt to change ideology. It is a very serious problem and as far as I can see we in the Army must keep to the old rule. I believe this is where both of our countries are in complete agreement. The rule is that if a man is unlucky enough to become a prisoner he is to give his name, his number, his age, and then "he shuts up." That is the safest way. Some of our allies who were also captured never spoke at all. I refer to our friends, the Turks.

Now that is something we must teach our troops, but is there more, and this is my question to you doctors. Is there more? Ought we to study this, ought we to bring our troops as part of their early education into the problem more and tell them how to resist this danger?

I was also interested to read, on studying this problem further, that when this problem first broke on us it was greatly exaggerated. I believe that a lot of young men who have been labelled in many ways with this particular tendency would succumb for a little extra treat, an extra cigarette, for instance. Of course, the real wise thing to do is to not take anything from your enemy; just give him what you have and remain courteously quiet.

This is a problem that worried my officers. I spoke to them about it. I think the Medical Services are the ones that can give us much help about the problem.

Now here is where I am going "to stick my neck right out." Are we living too soft in the West? I think so. We like our cinemas, our ice cream, our things of that sort; you cannot change from that in six weeks to a tough jungle soldier. Now how are we going to get around that? There it is; I will leave that as the unanswered question. There is a medical slant on it, and there is an administrative slant on it.

And now, ladies and gentlemen, may I come to my last point, a point from an ordinary fighting commander, and that is—disarmament. Disarmament—it is always in the headlines. In my life, ever since I was a cadet, one has heard of disarmament. It is what we aim for. In between the wars Britain and America were victims. We reduced the armament to a very dangerous level. What happened? The Hitler War. Now within the memory of all of us, in banner headlines a wonderful idea was thrust upon us. A very distinguished visitor recently said, "Let us have total disarmament." People said, "What a good idea." Well, all the West has been talking of nothing else most of my life. That is our aim, that is our policy, when we can do it safely. Disarming too soon and making a courteous gesture got us into the Hitler War. It was contributory anyway. Now here we are again.

When I was interviewed the other day by a very intelligent woman in this country, she said, "What do you think of disarmament?"

I said, "I am all for it."

She remarked, "You are a general, and you would be out of a job."

I replied, "Yes, let's get rid of all the Generals, all the Admirals, and all the Services, and put all that effort into the good of the country."

She said, "But good gracious me, don't you like war?"

I replied, "Yes, just about as much as doctors like disease; I regard the Service people as being custodians of peace."

She remarked, "Now wait a minute, I must write that down." That gave her a new line of thought.

If I may say, as a retired soldier and as a serving soldier, one of our greatest dangers, if we do not watch out, is that we will disarm too fast or too soon. It may take a dec-

ade; it may take a shorter time. If we do it, let us do it but let us do it equally and with equal thought, and with international inspection. There is a lovely American expression which I always use—"Don't let us get sucked in again."

You can speak from strength. We had peace for ten years—NATO. But we have to have an International Force. Perhaps it will not be the wonderful thing that we see here and that I have worked with. But just take NATO. Who would have thought that 15 years ago we would have sat around a table and have worked together as we do now. That is progress. Now let us spread that through SEATO. Let us have forces throughout the world that are in fact police forces and will bring in countries that have different ideas.

Why not? Who would have thought that I, a British General, would have commanded Scandinavian troops? Who would have thought a German officer would command British troops? That is fine. That is progress. Progress toward what? Toward disarmament and peace.

Now you see all these ideas are mixed; they are confusing. Let us see what we can do to get them together. Let us judge correctly in what is happening and what we see. There is a very serious thought and one which is very near my heart. That is why I welcome this opportunity to talk to such a wonderful distinguished audience. My thought is that we must disarm but we must not disarm out of balance. We must never disarm, to put it quite clearly, for the politician. We must disarm for the country, and that means with the advice of the Services. Now there is where I put myself on the spot.

Every Man Has His Breaking Point–(?)*

The Conduct of Prisoners of War

By

HAROLD G. WOLFF, M.D.†

In discussions of the problems of the control of prisoner-of-war behavior after the Korean War, much attention was given to the phrase: "every man has a breaking point." Dr. Wolff, in this paper, expresses views on this topic, based upon his examination of the historical record of prisoners of war in the light of scientific knowledge regarding human reactions to environmental stress. He has given particular attention to the problem of interrogation, but his discussion has broader relevance. Dr. Wolff's paper is submitted as a "by-product" of this study for the value it may have for officers concerned with "Code of Conduct" training problems.

A comprehensive bibliography of sources of information on this topic is contained in another special report of this study.[1]

IN AUGUST 1955, the background of the carefully elaborated Code of Conduct was presented in the report by the Secretary of Defense's Advisory Committee on prisoners of war. The opposing points of view were clearly expressed in the report. On the one hand was the opinion that only the so-called Spartan code by which a prisoner of war is restricted to name, rank, serial number, date of birth and nothing more, should be recognized. On the other hand a group of persons including physicians familiar with modern interrogation methods held that "every man has a breaking point." According to this view many prisoners in World War II were forced beyond name, rank and serial number, and nearly every prisoner in Korea divulged something. Why then, this group asked, should a man endure purgatory when his breaking was inevitable? This was referred to as the "let them talk" view. It was the consensus of this body of experts that it was virtually impossible for anyone to resist a determined interrogator.

Yet it was pointed out in the committee report that many American prisoners had indeed refused to capitulate.

Other authorities held that a prisoner might discuss his employment, his finances, his state of health, and conditions of captivity as necessity demanded. Having thus presented the conflict of opinion:

> "The Committee agreed that a line of resistance must be drawn somewhere and initially as far forward as possible. The name, rank and service number provision of the Geneva Conventions was accepted as this line of resistance. . . . However, in the face of experience, it is recognized that the prisoner of war may be subjected to an extreme of coercion beyond his ability to resist. If in his battle with the interrogator he is driven from his first line of resistance, he must . . . stand the final line to the end—no disclosure of vital military information and above all no disloyalty in word or deed to his country, his services or his comrades (may be condoned). . . . The Korean story must never be permitted to happen again."

The dual purposes of this report are: (a) to examine the facts and the theories of a group of experts concerning the view that every man has a "breaking point,"—where it is relevant, and where not relevant; and (b) to appraise the United States Government's policy regarding responsibility of men in the armed services.

The phrase "breaking point" generally alludes to the disorganization of human behavior that follows stressful experiences. It came into common use about the time that interest

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was directed to the unusual acts of prisoners who had been exposed to Communist methods of interrogation and indoctrination. It has long been known, of course, that following prolonged battle or the excessive effort induced by catastrophes, men break down so that they are no longer effective or capable of integrated action in battle. But the widely shared inference from the experience of prisoners of war that a "breaking point" of conduct might be imposed by stressful circumstances having not mainly to do with physical effort, injury, or bodily abuse raised new questions.

This matter is of special interest to the people of the United States because they have been humiliated by vivid reports of deviations in behavior of American soldiers as prisoners of war of the Communists. The first shock to Americans at home came when ostensibly responsible citizen-soldiers and ranking officers, after capture, gave public expression to attitudes and utterances that were both untrue and damaging to the cause, honor, and prestige of the United States. The reaction at home was confused and violent and included from time to time and in varying degrees, shock, pity for the prisoners, shame and feelings of guilt about their acts, and indignation toward the enemy.

Soul searching was called for and much effort to ascertain how such character metamorphosis of our men could occur. It was the first time that the behavior of prisoners of war had been revealed, at the time it occurred, to the great mass of the people at home, as it was the first time that American prisoners had been used by their captors in such a humiliating and embarrassing way on such a large scale.

U.N. Prisoners in Korea

Of 6,654 U. S. Army men known to have been in prison camps in the Korean War, all but 463 were taken prisoner in the first 12 months: thus most of the captives were in Communist hands during practically the whole campaign, or almost three years. The management of prisoners during these early days was extremely primitive. During one so called death march of 90 miles by 900 men, approximately 10 per cent died. Also, during this period atrocities were common. According to official Figures, 1,036 Army men were murdered in this way. Word of this spread rapidly through the ranks, and atrocities after capture came to be expected generally.

The following quotations from an officer of the U. S. Army, based in part on hearsay, describes one officer's view of the chaos of social collapse among the Americans held prisoner in Korea.

> "It is a sad fact, but it is a fact, that the men who were captured in large groups early in the war were often unmanageable. They refused to obey orders, and they cursed and sometimes struck officers who tried to enforce orders. Naturally, the chaos was encouraged by the Communists, who told the captives immediately after they were taken that rank no longer existed among them—that they were all equal as simple prisoners of war released from capitalist bondage. At first, the badly wounded suffered most. On the marches back from the line to the temporary holding camps, casualties on litters were often callously abandoned beside the road. Able bodied prisoners refused to carry them, even when their officers commanded them to do so. If a Communist guard ordered a litter shouldered, our men obeyed; otherwise, the wounded were left to die. On the march, in the temporary camps, and in the permanent ones, the strong regularly took food from the weak. There was no discipline to prevent it. Many men were sick and these men instead of being helped and nursed by the others, were ignored, or worse. Dysentery was common, and it made some men too weak to walk."

The vivid report of this eye witness was conspicuously publicized and indeed, one man, a sergeant, was subsequently convicted by court martial of killing two seriously ill fellow prisoners by throwing them outdoors into the snow.

Granting that savage behavior occurred, nevertheless by actual count the number of such atrocious incidents by soldiers of the United States turned out to be very small.

The knowledge that the North Korean enemy took a few prisoners to prison com-

pounds and murdered many of those that fell into their hands was a factor in shaping attitudes of many prisoners when they were actually captured. They were, therefore, especially susceptible to threats of abuse, or death, and were terrified at the prospect of what faced them. This foreknowledge was also a factor in the disorganization that followed contact with the Chinese captors who not only ordinarily refrained from killing prisoners, but greeted them as friends and instructed them about the "lenient policy." The gist of this "policy" was that prisoners who cooperated with the Communists in their campaign for "international peace" would be dealt with compassionately.

The effects of the Communist effort began to show within four days after our Ground Forces first engaged the enemy in Korea. An American Army officer, hours after his capture, made a 900 word broadcast in the enemy's behalf. The enemy sent American captives back to their lines with propaganda leaflets urging U.N. troops to desert. Letters home urged that peace be established, that life under Communism was attractive, that the U.N. and the United States were warmongers. In the main, only those letters derogatory to the United States were permitted to get through.

The percentage of persons who collaborated might seem as high as 30 per cent if such acts as broadcasting Christmas greetings to relatives be counted, but in the final analysis it is likely that less than two per cent were ever involved in such serious collaborations as writing disloyal tracts or agreeing to spy or to organize for the Communists after the war.

Collaborators, Middle Men, and Resistors. Despite every effort to state the case accurately the figures presented must be viewed as gross approximations. The Korean war lasted about three years and involved about 1,600,000 United States military personnel. About 84 per cent of the Army prisoners had had no combat experience prior to Korea, although about three quarters were Regular Army personnel who had been in uniform for over three years. Of 3,323 repatriated Army prisoners of war it was alleged that the "collaborators," or "participators," numbered 15 per cent; the "middle" men 80 per cent; and the resistors five per cent. The collaborators were defined as those who had been recommended for court martial or who had already been court martialed; men who were suggested for dishonorable discharge or who were already dishonorably discharged; and men against whom some administrative action would have been taken had they not already been discharged from the military service.

The five per cent of the prisoners termed as resistors were men who were actually decorated for meritorious behavior in captivity as well as those men who were recommended for decoration by the Army. The "middle" men were those who simply did less than their fellows in either direction. Like the "collaborators," they infrequently performed acts of resistance. Like the "resistors," they seldom committed acts of collaboration. How did they fare with the captor who had rewards in one hand and punishments in the other? They did less in either direction, and they got less in either direction—less either of the captor's rewards, or of his punishments.

The relatively few collaborators were divided into three categories. The first included those who lacked the stamina to stand even the minimum of discomfort of any kind. The second group were opportunists or those who saw the chance to gain power and prestige through the approval of their captors. The third group, which was very small, were those who became converts to Communism.

Indices used to measure the amounts of pressure applied to the captives were not directly related to the incidence or the type of collaboration. From analysis of a group of American Air Force personnel, for example, it was judged that the harassment applied to those who confessed to participation in germ

warfare was not essentially different from that applied to those who did not confess, although there were some obvious differences in the situation within which pressures were applied.

Information about the behavior of the prisoners of war of other national groups in the United Nations armed forces is hard to come by, except in the the case of the British. Among 976 British prisoners of war in Korea, the proportion of collaborators was approximately the same as among U. S. prisoners of war. Whereas officers and service N. C. O.'s who made up about 12 per cent of to total of British soldiers captured by the Chinese seemed unaffected, one-third of all others were classed by the British as Communist sympathizers. Forty returned home "convinced Communists." The British report, however, identifies some as Communists before imprisonment.

The Turkish contingent, a small group of 220 professional soldiers, is often cited as an example of unusual resistance to the captors. Yet comparison with other U.N. troops is difficult because there was only one Turkish speaking member of the Communists' personnel who could direct the activities or mold the viewpoints of the Turks and little attention was paid to his utterances. Also since "hate America" was the chief subject of Communist propaganda, the Turks may have been of lesser interest. They were a more trained and seasoned military body. They were a picked group of soldiers and with or without officers, this "crack" corps never broke its chain of command; there was always a ranking person who took complete command. Nevertheless, one per cent of this group, i. e., two Turkish soldiers, were considered by their associates to have collaborated with the enemy. They were ostracized by the others of their group and may have been more violently punished subsequently.

A small group of Colombians, 22 in all, also offered high resistance, but again they were of less interest to their captors, and Spanish-speaking Communists were not available to harass them.

Of the 7,190 United States personnel of the U. N. forces believed to have been captured, a total of 192 of the returnees were accused by fellow prisoners of war of misbehavior serious enough to warrant investigation to determine whether prosecution should be instituted. Forty-one were found who might be deserving of some form of punitive action, but only 12 were tried and 11 convicted.

Of the 7,190 American prisoners of war, 23 refused to be repatriated when truce was declared. This number is now reduced to ten who still remain in China rather than risk prosecution for crime in the United States. One British marine refused repatriation. There is no evidence that U. S. soldiers and the single British marine who refused to be repatriated were exposed to strikingly greater pressure than were those who were not converted by the enemy. Rather, it appears that they were swayed by reward, or promise of reward, by the captor and by the threats of reprisal by their own men.

In contrast to this account of human failure under duress, stand the facts of those who resisted valiantly despite intensive and prolonged pressures and sufferings. Indeed, as cited above, five to ten per cent of the prisoners behaved in their resistance in a manner that could only be described as meritorious. Of those airmen subjected to continuous coercion to make germ warfare "confessions," half were able to withstand the duress, preserving their dignity and integrity. It is known that one died without "confessing"; there may have been others.

Since prisoners of war are expected to try to escape, and escape attempts are an indication of resistance to captors, the record of successful breaks from Communist captivity is also telling. No American supposedly successfully escaped from Chinese permanent prisoner-of-war compounds on the Yalu. These camps did not come into existence until 1951, however, and it is overlooked that during the early days of the Korean campaign escape was not unusual. During the later days, prisoners, knowing that negotia-

tions for exchange of prisoners were under way, were less eager to attempt escape. As a matter of fact, more than half of the approximately 500 survivors of the 700 Air Force personnel shot down or otherwise grounded behind enemy lines managed to elude or escape their captors. Indeed, it is probable that as many fliers evaded or escaped as were formally repatriated. This performance compares very favorably with the escape record in any of the recent wars, particularly since such factors as climate, terrain, racial identification, and the absence of contiguous neutral or friendly areas made the problems of successful escape unprecedentedly difficult.

Prisoners in Recent Wars

To put in perspective the facts just presented, data about the behavior of prisoners of war in past wars are relevant. Frequently cited is the statement that during the American Civil War some 3,000 Union captives joined the Confederate Army and about 5,000 Confederates went over to the Northern ranks. A company of reconstructed rebs relieved a Union garrison needed on the front. ("Reconstructed rebs" is perhaps the 19th century equivalent of "brain washed prisoners of war.") In Civil War reports occur dramatic descriptions of prisoner behavior almost word for word counterparts of those from the Korean campaign.

At the end of World War I approximately 2,200,000 allied troops were held captive by the central (Germanic) powers. Although proselytizing and impressing prisoners is almost as old as warfare, an unsuccessful attempt to get Irish prisoners of war to collaborate on the German side was probably the first major effort of this nature in recent times. The Germans captured 4,120 Americans. Few Americans escaped from Germany, but daring attempts were made.

During World War II, 129,701 Americans were captured by the Axis enemy. The approximately 25,000 U. S. prisoners of war held by the Japanese were miserably treated, but little effort was made to alter their political viewpoints. Some air pilots and submarine sailors were flogged and tortured with the hope of gaining important military information. Less than a dozen escaped from prison camps, and most of these who did escaped to the Philippine guerrillas.

United States prisoners of war of the Germans were usually allowed to organize according to the Geneva rules, and treatment of them was generally correct. Captured officers assumed command according to rank. H. J. Scharff, a German interrogator, questioned some 500 American fighter pilots, and claims to have obtained the information he was after from all but a handful. He was a genial, English speaking German. With background information from a carefully assembled dossier about each captive, he disarmed the prisoner with facts concerning his prewar family and social life. Scharff's subjects were not tortured, but they were baffled by his astuteness and misled both by his geniality and by their own inference that more was known about them than indeed actually was.

It is estimated that about ten per cent of the American prisoners of war of the Nazis offered remarkably little resistance, if not actual collaboration. About 94,000 U.S.A. prisoners of war were held by the Nazis. Less than 100 escaped and less than one half that number crossed the enemies' borders to return to Allied territory. None of the Germans held in the United Kingdom during World War II escaped and rejoined their forces in spite of the fact that there was no problem of racial identification. One escaped from Canada to neutral United States and ultimately rejoined the Luftwaffe.

The Russians made a vigorous effort to convert a large number of Panzer officers and Stuka pilots and masses of German prisoners. They succeeded in gaining hundreds of German converts, including a top ranking officer. German officers from highly disciplined military units of long tradition readily cooperated with their captors. With few exceptions these individuals gave the desired information and many became East German authorities. In one instance, within

four hours of capture by the U. S. forces, a German officer was broadcasting back to the German people reasons why they should abandon their cause. Nor were Russian Communist troops an exception. Indeed a whole division of approximately 35,000 Russian Communist troops changed uniform and fought on the side of the enemies of the USSR on the Western front.

Out of one group of a thousand of the 5,435 Japanese prisoners of war held by the U.S.A. during World War II, an American interrogator reported that only a bare dozen of the Japanese refused to give what information they possessed. The behavior of the other Japanese prisoners of war held in the United States was essentially the same. In spite of the Japanese military man's notorious devotion to *Bushido* and *Yamatodamashii* (The Spirit of the Japanese Race), the vast majority were cooperative and unresistant. The prisoners were for the most part farmers, fishermen, and unskilled laborers who had reached their years of awareness during the heyday of Japanese militarism. Attempts at evasion were easily confounded because the experienced interrogator knew far more about Japanese dispositions, organization, and methods than did the average Japanese soldier. There was no significant difference in the amount of collaboration between Japanese officers and enlisted men. Ranking officers, by the kindly treatment they received, by their own observation of the relations between officers and men, and from their personal intimacy with American officers became convinced of the moral superiority of the democratic way of life and, when repatriated, spread democracy among their countrymen.

The issue of repatriation did not come up for the Japanese and German prisoners of war. A poll of "sentiments" among German prisoners of war at the time of repatriation revealed the following:

Militantly pro-U. S.	33 per cent
Friendly toward U. S.	41 per cent
Not Nazi, but not pro-U. S.	15 per cent
Pro-Nazi	10 per cent

However, at the time that prisoners of war were being repatriated from the United States, 28 German and 15 Italian escapees were still at large. A number have subsequently been detected living in the United States. For the Germans, 28 escapees out of 435,788 of interned prisoners of war is 0.007 per cent. It is clear, therefore, that the actual number of escapees and the amount of resistance of prisoners of war other than ours were meager. Certainly the record is not strikingly different from that of United Nations personnel held captive in the Korean War.

Summary and Inferences

What lessons, then, can be learned from prisoner of war compounds where large populations are assembled and exposed to a variety of pressures? Are there any broad inferences from these data? In general, in a large population of captives, about five to 15 per cent actively resist their captors, between five per cent and 15 per cent offer no resistance whatever, or actively collaborate and the rest will fall somewhere in between. This is not grossly out of keeping with the general impression gained from underground movements in World War II. Among the captive populations of occupied Western and Southern Europe, between eight and 15 per cent of the people took active part in underground activities. As opposed to this number of active resistors, something more than five per cent of the populations were in active collaboration with the enemy. The rest were not identified with organized efforts of any kind, though sympathetic with the underground.

The morale of hordes of captives is seldom good and nowhere was this better exemplified than among the Jewish internees in the Nazi concentration camps. Perhaps at no time were prisoners more abused, degraded, humiliated, and more continuously threatened with death. Yet distrust, hatred, and contempt for fellow prisoners were common. Indeed, collaboration in a small per cent was recognized and some prisoners actually admired and even attempted to emulate and identify themselves with their captors. To be

sure this was no military body, but the individuals in it were united by common hatred of all that Naziism stood for, shared the effects of injustice, and had common ideals. Demoralization, however, was extensive and self-interest widespread. A very small group held to humanitarian ideals of behavior and very few of these survived.

Of the 4,428 Americans who survived Communist imprisonment in the Korean War, a maximum of 192 were investigated to determine culpability for acts resulting in bad consequences for comrades and the United States. Putting it another way, one out of 23 American prisoners of war was suspected of misconduct. According to F.B.I. statistics, one in 15 persons in the United States has been arrested and fingerprinted for the commission, or the alleged commission, of criminal acts. This comparable proportion certainly does not particularly indict the prisoners of war. The inference is, in general, that under adverse circumstances of captivity no more than ten per cent and probably nearer to five per cent of human beings will conduct themselves with distinction and in keeping with the highest expectations of their service and their government; and less than five per cent will be opportunistic or indifferent to their national cause. The rest fall on a scale somewhere in between.

The behavior of American prisoners of war was in general not very different from that of other men in other Armies and places, but was obviously made to appear much worse by the enemy's propaganda devices and our own initial ineptitude in countering enemy propaganda.

The Circumstances in Korea

Disorganization, Demoralization, and Death

It is always difficult during a campaign, and sometimes even after a war, to separate sharply what seems to be the result of diabolical cunning, organization, and meticulous preparation of the enemy, from accidents or fortuitous circumstances that are overestimated in value or misinterpreted.

To a considerable extent the procedures of the Communists were the sequellae of haphazard experimentation; the results of lack of suitable organization, housing, and equipment in the handling of prisoners. Due to a general suspiciousness of the western world, the Communists were unwilling to accept the neutral intervention and aid of such agencies as the International Red Cross. Furthermore, their acts reflected a primitive indifference toward the fate of the captive. Many of the abuses, however, were deliberate, calculated steps to break down resistance or to modify the viewpoint of the U.N. prisoners of war.

A most telling result of Communist disruptive procedures on United States prisoners of war was the creating in the prisoners of a feeling of being isolated, rejected, or alone. The captors further engendered this feeling of isolation by removing all leaders from among the prisoners. Help for the captives could then only be obtained from the captors. Disease and death are known to follow other kinds of isolation and rejection as in hexing, bone pointing, and excommunications. In experiments with rats in the laboratory, the placing as an interloper of a single strong rat from one organized colony into the midst of relatively weak members of another organized colony might result in death of the rejected creature even though physical abuse was minor.

Demoralization, starvation, cold, dysentery, pneumonia, faulty care, and miserable living conditions led to the death of about 38 per cent of the 6,654 captured U. S. servicemen in captivity during an average period of less than three years. This mortality rate was somewhat higher than that recorded after the forty months of imprisonment of U. S. troops in Japanese prison camps in World War II (about thirty-five per cent). Circumstances in both were dreadful; men were underfed, underclothed, sick, received little medical attention or support from their fellow prisoners or their captors; they were humiliated, abused, and demoralized. In many instances they gave up hope and died.

This mortality rate was roughly that of American troops 170 years ago in British prison installations during the War of the Revolution, and contrasts with the figures of the Western powers during the last major wars. During World War I a total of 4,120 Americans were captured by the Central Powers, of whom a total of 147 (less than four per cent) died in enemy prison camps. In World War II, only one per cent of American prisoners in Nazi prison camps died during their ten months of imprisonment. Of the 173,219 Communist prisoners of war held by the United Nations forces in the Korean War, less than two per cent died from all causes, including disease, battle injuries, and riots.

Hardship and Harassment

The methods used by the Communists on the prisoners of war in Korea grew out of the long experience of the Russian secret police combined with some traditional Chinese pedagogic and social pressure tactics. Prisoners of war were pressed to participate in group discussions of the evils of the American way of life and the nature and assets of Communism. Adaptation of Western instruments of communication to their purposes made large scale operations possible.

The aims, tools, and methods of an interrogator are much the same the world over. His purposes in essence are trifold: (a) to gain information of immediate value; (b) to alter the attitudes, and if possible, to change the allegiance of the captive; and (c) to recruit agents from the captives for the propagation of the captor's cause among other captives and conceivably among the captives' countrymen in the future.

From the defined purposes it is evident that interrogation and indoctrination are seldom far apart. The most effective means for achieving these ends do not involve physical abuse but may include threats of it. The strongest and most experienced organizations for this purpose are the least likely to employ abuse or threats.

Interrogators and agencies differ chiefly in the kind of technical knowledge in addition to trade craft that they possess and in their skill in exploiting opportunities presented by the captives. Talk and methods of evoking talk are the basis of operation. Repetitions and harassment are major tools; thus, in the Korean war some U.N. prisoners of war were interrogated as many as 50 times.

The following excerpts from the notes of an interrogator for the U.S.A. indicate the earlier use of similar interrogation devices on the Japanese prisoners of war during World War II. The Communists introduced and developed unique features.

"The veteran is suddenly cut off from the familiar tightly-ordered military life and is delivered defenceless into the hands of an enemy he passionately believes to be a prodigy of inhumanity. Unfortunately every army in the field, including our own, commits enough atrocities to give more or less basis for this belief. Japanese prisoners received at my stockades on Tinian and Okinawa were convinced that they would be staked out and run over by bulldozers, castrated, or mercifully shot summarily. Consequently, the most useful equipment for the interrogator in the field was not a set of thumbscrews or bamboo slivers but an inclination to treat human beings of any color with the most rudimentary sort of decency."

The permanent camps put a new and formidable weapon in the interrogator's hand, a system of life in which interrogation and indoctrination were accepted as normal.

"From the moment the prisoner filed through the main gate, he was the object of a deliberate effort to break down his conception of himself as part of an organized military system. We were obliged by practical problems of administration, as well as by the Geneva Convention, to separate officers from their men. The enlisted man was assigned to duties without regard for his rank—a state of affairs which bewildered newcomers accustomed to an army in which a second class private saluted a first class private, who saluted a superior private, who saluted a corporal. The prisoners accepted the appointment of a capable and, from our point of view, 'progressive' first class private as hancho or headman, in a compound containing assorted non-commissioned ranks."

Threats of torture were made, but never carried out. Compare this description of procedure with the explanatory address to U.N.

prisoners of war which according to one returnee might be presumed typical of a Chinese captor:

"You must all know there is no longer rank among you. All are prisoners. No matter what your rank may be when you are captured; now you are prisoners, everyone is same—same. Later on we make one of you squad leader only to give orders we say. Also squad leader will bring request to us. You do not each one ask for things, only you ask squad leader and he ask us. By our lenient policy we guarantee all prisoners be treated fairly who abide by rule. . . ."

Why Prisoners Talk. Only after bitter experience did men in their new role as prisoners of the enemy learn of the untoward effects of talk, and how it could be used against them and against their fellows. The interviews with prisoners returning from Korea revealed that strong feelings of guilt were common. One cause of such guilt was the awareness that one had talked too much, even innocently, and perhaps by so doing had injured others, demoralized the group, and supported the enemy. Feelings of guilt and self-blame for not having done as much for the wounded, or of failing fellow prisoners, were additional causes of the mental torture of the captive. (Such feelings were also striking in many of those who survived Nazi concentration camps.) If he can thus engender guilt in the captive, the captor's battle is more than half won.

Ignorance and fear of the unknown strongly favored the captors of the prisoners of war. Newly taken prisoners were unclear as to how they should behave. Many had received no instructions; others had been variously instructed, e.g.: "say anything they want you to say," versus, "don't say anything," versus "tell them some sort of a story." They were also ignorant of the values and attitudes of the Communists, and how these contrasted with the ideals of democratic societies. In the Korean prison compound the capacity to resist was weakened by terror of what they might expect from their captors and how it might affect them; of the horrors of so-called brain-washing, of physical torture, murder, and rumors about those "inscrutable Orientals" who could make one do things one did not want to do and make one forget that he had ever done them.

The bad effects of fear of the unknown were familiar also to the internees of the Nazi Concentration camps. The following quotation is illustrative:

"The nature of the initial reaction (to concentration camps) was determined by the psychological condition of the victim, which means that the conception he has formed as to what would happen to him was the determining factor. If the conception conformed to reality, the initial reaction was not very violent. . . . I had a fairly accurate idea of what was in store for me. I entered the camp with the knowledge that inhuman conditions prevailed and that I was very likely to die there. [The author was never crushed and indeed survived the experience.] . . . The overwhelming majority had no notion or only the vaguest notion of what a concentration camp really was. The response to this was a fright reaction when the situation actually was encountered and perceived."

The Communist tactics used on prisoners of war in Korea also resulted in part from a generation of experience in the long years of the revolution in China in dealing with captured soldiers of the Kuomintang. In that struggle the Communists had continual need for realigning the loyalties of large bodies of captured or surrendering troops of the Kuomintang. Indeed, some bodies of Communist troops captured by the U.N. Armed Forces expressed surprise that they were not obliged to reverse their direction and, under new banners, fight against their former colors. Thus, quick change of allegiance and instability of loyalties was a familiar feature. This attitude was in part the basis of the "lenient policy" offered to those who were willing to collaborate, and the neglect or abuse of those who attempted to resist such shifts in affiliation.

In China the success of Communist methods appeared considerable, but it was in North Korea that they were applied for the first time by the Chinese on a large scale to Western prisoners. It is difficult to estimate the effect of such tactics even on the Chinese and North Koreans, since one of the strik-

ing facts about the Communist prisoners of war was that many refused repatriation, thus losing permanently family and home. This evidence of doubtful loyalty to Communism was significant despite the fact that many of these troops had probably not been in the Red army as long as a year, having been within that time taken over from the collapsed Nationalist army. Perhaps longer exposure to Communist tactics would have had more lasting effects. Nevertheless, as a rule, they had served valiantly and without deviation as long as they were under the Communists' aegis. The Communists do not need a conversion or conviction for effective results, if those under their influence do not enter the orbit of the Western world. However, defection may follow such contact. Of approximately 170,000 Koreans and Chinese captured, less than half accepted repatriation. In contrast, of the approximately 12,000 U.N. prisoners of war who have been accounted for, something over 300 South Koreans, 21 Americans, and one Britisher refused repatriation, a ratio of about one to forty.

Categories of Breaking Points

As there is a point of tension at which a rope breaks, a point of breakdown for a swimmer or runner, a "breaking point" for the individual organs and functions of the body so there is a breaking point for the high level functions of the brain. Does it follow that the pressures or circumstances that bring about these crises are relevant to that breakdown having to do with a man's will to resist the bidding of his captor, to resist accepting his values, to resist furthering his captor's ends?

It is now well known from experience in civil life that under circumstances of duress, the various bodily systems and organs break down, giving rise to symptoms and signs of disease. Military combat is one of the gravest challenges that contemporary man has been called upon to meet, especially as epitomized by the infantryman's experience.

Although it is well known that capacity to endure combat is extremely variable, it was possible to ascertain from study of a group of men who had performed well, or even in a distinguished way, that after a given number of days of combat a point is ultimately reached by even the most stalwart beyond which efficiency falls off seriously. The persons investigated were for the most part highly motivated and reluctant to be relieved of duty, but did ask for reduced responsibility. The need to remain alert, the lack of comfort, and combat noises, especially at night, evoked in these combat-sensitized soldiers a depleting "on guard" reaction. They were excessively tremulous, sweated profusely, complained of dyspepsia, were extremely cautious, had difficulty making decisions, avoided responsibilities, and said they would soon be killed in battle.

The breaking point of the average man in the Army of the United States was reached after about 85 days of combat. Indeed 75 per cent could be expected to break down by combat day 140 and 90 per cent by combat day 210.

Loss of sleep was probably a significant factor in such collapse. The almost continuous shelling, the strange night noises, flares, sentry and patrol duties, rain, snow, cold, heat, insects, and the ever present threat of the enemy—conspired to make sleep at best intermittent and scanty. In spite of his lack of sleep the soldier had to undergo long periods of exertion, more often than not on a diet that was deficient in calories. Even when food was available, he either would not carry enough of it with him, or he was too frightened to eat the proper amount.

In other words, if one speaks in terms of the ability to carry on effectively in battle with accurate and appropriate gunfire and other aggressive actions—in marching, integrating with the maneuvers of others, recognizing and interpreting complicated signals, bearing heavy burdens, withstanding high or low temperatures and bodily injury—without collapse, disorganized or delayed performances, then, indeed, every man has a "breaking point." This breaking point is postponed by means of special training or particular supports that engender "fitness"

and postpone the "breaking point" in particular ways. There is no way to engender "fitness" in all spheres. The postponement of "breaking point" is always in terms of a particular job, task, and integrated aggressive or defensive action.

To run cross-country requires training in running long distances, i.e., the development of particular muscles, unique timing as regards sprints and holding back, and the development of a particular type of circulatory and ventilatory efficiency. Indeed, this fitness is so particularized that the well trained cross-country runner would probably fail to run the 100 yard dash as effectively as he did before he became fit for his longer run. Fitness for effective action in a submarine would not prepare one for effective action in Alpine fighting. Those who must work in deserts or near the poles of the earth can postpone the breaking point under these extremes by "acclimatization" in these zones. Persons with circulatory failure may walk up more stairs before reaching their "breaking point" by taking digitalis; those with diabetes can skirt starvation and coma by taking insulin. Those with Addison's Disease can delay "breaking" with asthenia by taking table salt. Those with peptic ulcer can avoid the "breaking point" of gut perforation, bleeding and obstruction by the taking of food, alkalis, and belladonna-like agents.

The Nature of Commitment

Resistance to "confessing" to "germ warfare," or to making broadcasts for the enemy, is not in these categories. To labor the point is unnecessary since it must be clear that "breaking point" when it involves conviction, loyalty, belief, faith, or any aspect of commitment is of a different order.

Commitment may be viewed as a form of adaptive behavior evoked in response to situations which an individual perceives as challenging or threatening to his concept of himself as a man, or to the very survival of his tribe. Hence to be committed implies the maintenance of a belief, faith, conviction; adherence to a course of action; persistence in pursuit of a goal; remaining loyal to persons, party, team, gang, platoon, regiment, and country; and being steadfast to one's values. Furthermore, it implies such persistence, adherence, loyalty, and steadfastness in the face of obstacles, deprivations, bodily and mental defects, and even death. Highly developed commitment is found in relatively few persons.

Biologists are illuminating the nature of this behavior and a view held by many is that the capacity for commitment derives from that basic property, the purposive pursuit of a goal, inherent in all living forms. Mind is rooted in purpose, another name for the self-regulatory and goal-seeking nature of protoplasm. Mind is the aggregate of purposes, needs, appetites, and drives arising from the parts (including the brain) and the whole of the human organism. The brain is the organ of means for maximum adaptive versatility and creative activity. The highest level functions of the brain are not all equally fragile, and purposiveness, although it implicates these high level functions of man, may survive many other functions.

Brain Damage and Commitment

The question may then be asked to what extent do the agents or procedures that damage the brain or modify its function affect resistance to captors or result in the breakdown of a man's commitment. Damage to the brain causes impairment of the mental functions, the amount of impairment being related to the amount of brain damage. Factors that interfere with the "internal environment" (amount of blood, oxygen, salt and sugar that reach the brain) cause impairment of the functions of this organ, and its capacity to modulate the purposive activity of a man, but does not necessarily cause a man to break with his convictions.

Damaging the brain, as results from toxic amounts of chemical agents, makes the individual of little practical value as a source of information to his captors or as an agent for treason. Furthermore, damage to the brain by surgical, chemical, or physical means, while it sometimes lowers resistance,

also reduces the capacity to remember. Experience with a host of civilian persons who have undergone such operations does not suggest that these procedures in themselves make an individual any more likely to reveal confidences of an important nature. Brain damaging operations and procedures may make persons less rigid but certainly they also make them less effective in planning and carrying out instructions. Furthermore, the results are unpredictable and could not be counted upon for the achievement of an exploitable alteration of personality. Again, to be emphasized is that no amount of brain damage brings a man to a breaking point that makes him reveal information, yield to the wishes of his captors, or reverse a basic conviction or commitment.

The Effect of Prolonged Adversity

It is known now that factors which interfere with a man's interaction with his environment also damage brain function. Total isolation and severely restricted sensory stimulation are followed by temporary impairment of high level brain functions. Men subjected to the prolonged abuse and hatred of their fellows, as in prison, behave as though their heretofore actively functioning brains were severely damaged. They pass through predictable states of progressive impairment, comparable to the impairment observed in subjects with progressive loss of brain substance. Complete isolation, lack of opportunity to talk, repeated failure, frustration, and the revilement of other men cloud the mind, may make a man confabulate and become more suggestible—but do not inevitably cause a man to collaborate with his captors.

How much does the brain share in the damaging effects of prolonged stress? It was found that persons with no evidence of gross anatomic disease of the brain but with long standing anxiety and other disturbances in behavior and mood also had severe thinking and adaptive difficulties. Indeed, they performed in work-a-day circumstances and in test procedures as though massive amounts of brain had been damaged or removed. Those with effective defenses such as blaming, rationalizing, sublimation, denying, pretending, or withdrawing from participation, showed less deterioration in brain function. But when these defenses were no longer adequate or stress had been too prolonged, these individuals too, acted as though their mental process had led to alteration in the material substrate of the brain.

Acts which humiliate, destroy self-esteem, create feelings of being isolated, rejected, abandoned or unwanted may impair integrative capacity at the highest level. Threats of punishments by beating, threats of harm to loved ones, or falsehoods about the state of one's associates, family or country, the withholding of incoming mail or delivery to the prisoner only of those letters that contain bad news from home, are damaging. Likewise a host of deprivations and denial of sleep, as well as exhaustion, pain, starvation, malnutrition, sepsis and intoxication affect integrative capacity, but do not cause breach of faith in those who are committed.

Sleep Deprivation and Primary Purpose

Recently in civil circumstances a man had an opportunity to further the cause of the care of ill children and to contribute to scientific knowledge by proving that he could remain awake 200 hours. His motivation was fortified by public interest and approval. This experiment was done with widespread publicity which he hoped would help his career as a radio and television broadcaster. During the eight day period, entirely deprived of sleep, it was necessary for him to broadcast his three hour program and make one television appearance daily. He was keenly sensitive to the dangers for his performance of inappropriate remarks or behavior, and carelessness about timing. Careful studies made in the laboratory during this period showed progressive, grave impairment of his capacity to learn, attend, remember, concentrate, and discriminate. Moreover, in the laboratory between broadcasts, he became suspicious, profane, obscene, impulsive, bold, explosive, and truculent, and had delusions of being poisoned

and that those about him were part of a plot to ruin his career. Most of the time his speech was mumbling and slow as were all his movements. Yet his performance of his task as a broadcaster, involving previously acquired skills, and on which his ambition was focused, was articulate and professional. Though he lacked his usual sparkle, he was not careless, profane, or indiscreet, even at the end of this long period of sleep deprivation when truly many of his highest level functions had long passed the "breaking point."

Sleep deprivation carried to a point of induced stupor failed to evoke false confessions from committed flyers who were prisoners of war in Korea.

The Limitation of Drugs and Poisons

Chemical agents such as alcohol, canabanol, caffeine, barbiturates, benzedrine, LSD 23, mescaline, hyacine, and others may facilitate talk and the process of persuasion. However, the pharmacodynamic actions of these agents do not in themselves prevent an individual from falsifying or withholding information. An atmosphere of friendliness and sympathy promotes a feeling of confidence, a feature of human nature which is profitably exploited in the obtaining of secret information. Certain chemical agents can be used to promote feelings of serenity, well-being, camaraderie, and freedom from restraint and anxiety. However, chemical agents as ancillary to interrogation not only may fail to yield rich rewards but also may actually block such revelations; for example, the anxiety or panic induced by awareness of being "drugged" may cause subjects to become especially suspicious, cautious, and taciturn.

Hypnosis and Values

Through hypnosis certain individuals who have seriously conflicting attitudes can occasionally be induced to perform violent acts of aggression; for example, sexual indiscretions or perversions, acts of violence against members of the family, rivals, enemies, superiors, or intimates. Post-hypnotic suggestion may operate for some days under these circumstances and be followed by amnesia, but acts of treason against the state or collaboration are not known to have occurred through hypnotic suggestion. The practical importance to the enemy of such methods in regard to persons of undivided loyalty is negligible.

Talk, Persuasion, Seduction, and the "Breaking Point"

By far the most effective way of gaining information from persons or of modifying their point of view is by talk under friendly or relaxed circumstances, when the brain is neither damaged nor impaired in any way, and by using no more elaborate devices than would engender talk between humans anywhere. For example, in Korea, the newly arrived U.N. prisoner of war was told that his captors were glad to have him; glad to have liberated him from the clutches of the "Wall Street warmongers"; glad that he was free from further dangers on the battlefield; that they would demand nothing of him; that they weren't going to mistreat him; that they merely wanted to give him a chance "to learn the truth."

Obviously some persons are more skillful than others in evoking talk, and experience is important. Furthermore, in regard to giving out information and having no after-knowledge of the deed, several facts are well known. One may, simply in talking conversationally, say something unknowingly to a skilled interrogator which may be of great use to the captor. Certain chemical agents, which increase talkativeness, may augment this process.

Exploitation of already familiar facets of an individual's nature is a most effective method of modifying a person's behavior and attitudes. Talk by the subject or by his written word are the usual ways by which the interrogator acquires such familiarity, since by these means the prisoner reveals much about his past, his hates, loves, and ambitions. Contrasted, then, to the punitive methods that impair brain function are the more effective methods of persuasion and seduction involving talk, used to induce an indi-

vidual to reveal information wittingly or unwittingly. Given sufficient time and the essential skills, it is possible for a captor to elicit by persuasive methods, without the use of chemical agents or severely punitive means, much desired information. It is impossible if the individual is forewarned and prepared and has a strong conviction of his responsibility.

In summary, when the brain is damaged either through surgical means, through actions of poisons, or by distorting an individual's interaction with his environment, perceptions may be blurred and mental processes may be slowed. Recent memory becomes faulty, thinking becomes difficult, and if pressed, some individuals may develop fantasies, hallucinations, and they may follow suggestions too readily. The results may throw subjects into panic. Similarly, in hypnosis, the subject becomes suggestible and often, as a result, his behavior becomes bizarre. But it is impossible to induce him to do an act which is strongly opposed to his convictions. Persons with major amounts of brain loss or damage who have impaired functions that make them incapable of many of their skills, may still hold on to a faith. As long as he is conscious, a man is capable of remaining committed to basic beliefs and convictions, although in many ways his behavior may be altered. Although intact persons, through talking and extensive writing, and being persuaded and seduced, are in danger of yielding important facts, the most skillful interrogator fails to get information from committed persons. When a man is willing to suffer or to die for a commitment, there is no "breaking point" regardless of guile on the one hand, or of the faulty performance of his bodily organs or of his brain on the other. In this sense, then, man is so constituted that he can adhere to a faith and resist a captor so long as he acts at all.

Character and Capacity to Resist

Characteristics of Collaborators and Resistors

What can be said about the dominant personality features, character qualities, and behavior before capture of those who after capture were the most ready and active collaborators, and on the other hand of those who exhibited the greatest resistance?

In extreme instances prediction is possible; that is to say, an opportunist will remain an opportunist. An individual's ready capacity to rationalize and justify behavior and deficiencies before captivity is directly related to his willingness to comply with his captors' demand when taken prisoner. Certainly the most flagrant examples of collaboration with captors in the Korean campaign and ultimate refusal of repatriation were not found among those who espoused Communism because of deep ideological convictions, but rather because of lack of convictions, and because of the opportunity of improving their immediate situation. Indeed there was no relationship between the degree to which a man accepted Communism as an ideology and the extent to which he complied with the captors' demand for collaboration.

No significant differences were found between collaborators and resistors with respect to rank, branch of the military services, or amount of prior military or combat experience. In common with the resistors, some of the collaborators had superior intelligence, schooling, urbanity, energy, persistence, resourcefulness, and the ability to organize, lead, and get things done. These were bold and were capable of taking effective action in crises. Indeed, some such collaborators exhibited a high degree of adaptive versatility and were in some instances that type of person who has worldly "know how" and is found to be "doing well" regardless of the upheaval or disruption of his society. Their energies were bent upon personal goals and self-survival, not necessarily at the expense of others, but certainly not with the furtherance of group or national ends as the central theme. The resistors had been more frequently decorated by the army prior to Korea than had the collaborators. More evident among the resistors were such character qualities as persistence in carrying out orders, stubbornness, willingness to accept challenge, firmness, dedication, independence. Neverthe-

less, some of this group had truculence and reluctance to bow to authority and regimentation from any source. Moreover, qualities of loyalty to service and nation, steadfastness, resistance to being pushed around, the capacity to make up one's own mind, to have a conviction, to have faith in an attitude, institution, or procedure, and firm belief in the humanitarian principles of the Western World were more in evidence in those who offered the most resistance to their captors. These individuals usually reacted to circumstances perceived as threatening with feelings of anger and appropriate aggressive action. For example, one man who never capitulated despite prolonged and intensive efforts on the part of his captors discovered that he could terminate a long period of harassment and interrogation by precipitating a brawl with the interrogator. This resulted in physical punishment but did temporarily end the pressure.

An analysis was made of the character qualities of the crew of a USAF airplane shot down in the Korean campaign. A comparison between the performance after capture with that before capture was made on the basis of behavior in barracks, in air battle, and during survival-camp training. Based on these observations the leader of the group was induced to make estimations about the behavior of his crew in captivity, he being not fully aware of what their actual performance had been as captives. In the estimation of the crew leader, who himself never capitulated, even after 29 weeks of persistent and intense pressure, the men most likely to resist were, one who never capitulated even after 26 weeks of heavy pressure, one man who resisted for 28 weeks before capitulation, another for 22 weeks, and a third for 11 weeks. One of those he estimated as least likely to offer resistance only survived one week of pressure.

All ten of this crew were of approximately the same age and all had about the same schooling. The best and the poorest performances were found among both married and single. The number of years of military service at the time of capture varied from three to nine years, and in two instances those with the longest resistance had the least number of years of service at capture, whereas one with long service offered the least resistance. The highest ranking man was not among the best performers, and the poorest performer had moderately high rank.

Most had wounds, but of the two most conspicuous resistors, one had wounds and the other did not. When asked what the individual regarded as the precipitating factor causing him to confess to an act of which he was not guilty, namely participation in germ warfare, the fear of death and the fear of torture were cited by those who capitulated most readily. One individual capitulated on the threat of reprisal against his family. The same threats had no influence on the two members of the crew who never capitulated.

Although the circumstances were not the same for any two individuals, there was little relation between the amount of pressure in time and intensity, and the resistance of these individuals to their captors.

The Capacity for Commitment

Some exceedingly able officers who were highly trained, skilled experts and technicians, essential to the complicated machinery of modern war, demonstrated that they hadn't the necessary experience to take the responsibility for men in the crises of the Communist prison compounds. On the other hand, a most distinguished exhibition of resistance was given by just such a technical expert who also happened to be a man with convictions and with those character qualities linked with capacity for commitment.

It also appeared that relatively high ranking officers, usually middle aged men, despite distinguished action under battle conditions, in some instances offered less resistance when captured than younger men in less responsible roles. These older officers were often exposed to considerable pressure, but it was not always greater than that which had been withstood by others younger and lower in rank. It is possible that the homage, prestige, and great respect accorded these

high ranking persons under conditions of war made it difficult for them to withstand the humiliations, degradations, and insults to which they were exposed so suddenly.

Although there is a rough correlation between behavior before and after captivity, it does not always follow that all of the "good" qualities which make for effective civilian or military behavior are those most relevant to resistance as a captive. For example, in the case of a relatively high ranking officer with a superior education, his relation to authority was such as to make him especially vulnerable to approval or rebuke. Indeed, considerable approval and applause from those in authority were almost a necessity to him. Before being captured, when he happened to be caught in some irregular act or rule infraction, he became excessively anxious and figuratively threw himself on the mercy of his superiors and then freely and abjectly admitted his guilt. This officer's fear of being "caught out" was linked with an incapacity to appraise situations properly and his own expectation that his chances of being "caught" were good. Hence, again and again during his early life he would be the most likely man to be caught with the goods and roundly punished. Capture by the enemy evoked in him the panic and prostration that had characterized his earlier experiences. His longstanding feelings of guilt, his unusual dependence on approval by authority, his proclivity for anxiety and panic when faced with disapproval, and his easily shaken self-esteem caused this man as a captive initially to offer little resistance to his captors. Later he became more stubborn and resistant. Yet he had been an able student, a conscientious soldier, a responsible and effective officer, and would ordinarily be considered a person of commendable qualities. It is this kind of complexity that allows of no ready statement concerning the relations between behavior and character before capture, and that which followed incarceration. In most cases, a belief in oneself better enabled a man to endure the attempts at disapproval, humiliation and degradation imposed by his captors. Men did not readily withstand their captors, however, who concealed insecurity, doubts, misgivings, and feelings of inadequacy beneath a veneer of tireless effort, conscientious or perfectionist deportment, arrogance, vanity, and insistence on status recognition.

Commitment in a captive affects both captive and captor. To the captive, the committed state is relatively tranquil and conflict-free, and enables him to mobilize his resources, to meet the captor's pressures, and to offer maximal resistance. As regards the captor, such a show of strength unwittingly moves him to act with as much restraint and to accord such respect as the situation will allow. So, too, does the willingess to die in active resistance have a very different effect on the individual than a "giving up" attitude in the face of what appears to be an overwhelming catastrophe. Commitment mobilizes all resources of offense and defense of which the individual is capable, and furthers survival in the face of incredible assault, whereas an attitude of capitulation is linked with a host of changes within the organism that enhance the effects of injury and deprivation, and seriously threaten survival.

A weak development of the capacity for commitment in some prisoners was linked with never having experienced a firm faith and with living in an environment which was shifting, unsettled, opportunistic, cynical, or devoid of strong ties. To be considered, also, is the fact that the affective life of some individuals is inherently thin, and their capacity for love, devotion, faith, and loyalty of a low order. It is not possible at the moment to ascertain all the factors which make for this low capacity for commitment, nor the extent to which it is inborn or acquired. Individuals with weak commitment can be carried along by the group in which they find themselves, and will be more or less stable in their allegiances as long as fear of punishment and expectation of awards are sufficiently strong and balanced. Should the group become disorganized, or leadership be absent, these individuals cannot be expected to adhere to a cause, and indeed they do not.

Although not primarily relevant to the problems of the Korean prisoners of war, experience with a number of civilians exposed to Communist methods indicates that there are several ways by which the lack of commitment makes a man peculiarly vulnerable to the pressures of Communist captors. An example is the individual who at the time of his impact with Communism is without such convictions, but who in his early years experienced the vitalizing effect of a belief. Through growing knowledge and training to see the two sides of all issues he becomes skeptical, doubting, and cynical. Such an individual may be ready for a "conversion" if offered a complete system.

Having rejected, and feeling that he has been rejected by his family, church, and social groups, he stands alone. His rebellion and strong feelings of guilt based on highly personal early life experiences may also be factors in precipitating his conversion to Communism.

Particularly susceptible are those individuals who may already have leanings toward Communism before they are exposed to the pressures of Communist captors. Their struggles and delays in conversion, if they occur, are more apt to be linked with feelings of personal unworthiness than with doubts about the validity of their captor's viewpoint.

This is the plight of some so-called intellectuals and idealists and some former adherents of strong religious organizations. The actual number of persons so converted is small, but they may occupy important positions in politics, education, or in technical or administrative installations.

Finally, there is a very small group who exhibit the kind of commitment seen in criminals and other anti-social characters who hold allegiance to a cause by virtue of a hate. Such commitments are often exceedingly strong, and are seen in criminals who would sooner die than cooperate with their captors, the police, but will ally themselves sometimes loosely, sometimes firmly, to any group or person that will bring destruction, and wreak vengeance upon a society which they feel has injured them. Commitment in such persons can be of the most intense sort and capable of expressing the most violent hostility and brutality; it can cause an individual to be fearless in the face of overwhelming attack. Such persons are sometimes seen in underground or partisan movements, though they seldom outlive the period of social disorganization and collapse linked with wars and revolution.

As has been emphasized above, the basic reason for most of the collaboration observed among the U.N. prisoners of war was not conversion to Communism but rather the avoidance of discomfort and harassment and the prospect of getting from the enemy food, warmth, clothing, medicaments and comforts. From the point of view of the captors, these motives were sufficient in the short term sense of minimizing the difficulties of restraining prisoners. If, in addition, a few of the collaborators could be sufficiently instructed in Communist concepts to outlast imprisonment, so much the better. Conversion or commitment to Communism was not necessary to the ends of the Chinese or the North Korean captors.

Although some prisoners were adept at "playing it cool" and allegedly used some collaboration to avoid other collaboration, usually the fruits of collaboration were bitter. Though rewarded by more food, cigarettes, and other comforts, *some* collaboration almost always called for *more*. The captive risked becoming implicated in embarrassing compromises, the injuring of fellow prisoners, and ultimately a few became involved in acts little short of treason. It became increasingly difficult for the active collaborator to identify himself with the cause of his nation to re-ally himself with his group and to avoid moving beyond the point of no return. This, in general terms, was the fate of those Americans who refused repatriation. It was not only difficult to return, but they may have felt return might have meant death by murder to do so.

In summary, a careful preliminary survey

of the character and past performance of men who might be exposed to prisoner of war conditions would probably indicate those who would offer the most resistance and those who would offer the least, even though there is no single test, character quality, procedure, or other criterion which would be invariably reliable in making such prediction. The capacity for commitment to services and country, loyalty, and taking a firm stand, the ability to identify oneself with a unit or group are likely to be found in those who offer the most resistance.

What Must Be Done?

The significance of the hero in battle or of the resistor and the escapee in prisoner of war camps, to be sure, is not to be measured in terms of actual tactical achievements: he serves mainly to inspire others who are less courageous or less willing to die for important ends. He acts chiefly as a social catalyst and energizer, and as one who prevents the decay and death of his group and the individuals in it. The most profitable resistance training should be directed toward the eighty per cent or more of a population whose attitudes, behavior, and values are so much influenced by leadership and acts of meritorious behavior in the few.

The courage and resistance of the average man are reinforced by high group morale. This can and must be achieved by the services in two separate steps. The first step involves military training and discipline so that individuals may become identified with military groups in which there is an unbroken chain of command; so that officers are unquestionably recognized, trusted and obeyed, even when a captor discredits and attempts to undermine his authority. No one more clearly recognized the importance of unified effort and group organization than did the Communists. As a matter of fact, the Communist prisoners in the U.N. prison compounds had a better opportunity to demonstrate the validity of this thesis than did the U.N. troops, not because they were braver or had more convictions but because they were ably led, and more experienced in political employment of military forces. They did so by exploiting the advantages accorded prisoners of war by virtue of the U.N. adherence to the rules of the Geneva Conference. The most striking exhibitions of the effectiveness of competent leadership came from the Communist prisoners of war held by the U.N. forces on Koje Island.

The prisoners were divided, one faction remained strongly Communist, and the other equally violently anti-Communist. In both, morale was high and resistance organized. In accordance with the rules of the Geneva Conference, it was permissible for groups of Communist prisoners in Korea to select their own leaders. Also it was possible for experienced leaders to be surreptitiously introduced into the group from without. Since vast numbers of prisoners of war were taken by the U.N. forces, the inclusion of such trained organizers was not difficult. Chinese anti-Communist sources also secretly introduced trained leaders into the compounds in Korea. These leaders whipped up morale, unified effort, incited riots, broke up opposition. In one instance, facilitated by the low guard-prisoner ratio maintained by the U.N., these leaders captured the U.N. commanding officer of the compound.

In contrast, every effort was made by the Communist captors to prevent the rise of natural leaders among U.N. prisoners of war, to remove all those who had been recognized, and who assumed their leadership role, and to prevent the introduction of experienced organizers from without.

The second step to be taken by the services is to emphasize the futility and genuine hazards of collaboration with the enemy. No man should be left with any doubt as to *what is collaboration* and *what is proper conduct* of a prisoner of war; to what extent he must be subservient and obey orders, and *when he must not;* to what extent it is correct to speak. He must realize the futility of debate with the captor, and the hazards of trying to lie or to outwit the captor unless he is specifically prepared before captivity with

a "tight cover story." For the average soldier or officer it is safer to adhere strictly to a minimum number of facts that have no military significance, exchanges having to do with the duties of a prisoner of war, and to avoid all other talk.

Section 5 of the Code of Conduct also states clearly what instructions to the serviceman should include:

> "When questioned should I become a prisoner of war, I am bound to give only name, rank, service number, and date of birth. I will evade answering further questions to the utmost of my ability. I will make no oral or written statement disloyal to my country and its allies or harmful to their cause."

It is indicated further in the report that a compassionate and just attitude will prevail in judging a prisoner of war who has capitulated. Thus:

> "The provisions of the Uniform Code of Military Justice whenever appropriate continue to apply to members of the Armed Forces while they are prisoners of war. The conduct of prisoners is subject to examination as to the circumstances of capture, and through the period of detention with due regard for the rights of the individual and consideration for the conditions of captivity."

The phrase "to the utmost of my ability" bespeaks a recognition of the fact that few individuals are likely to resist in the face of many deprivations or to the point of death and, indeed, that the bulk of any large group of prisoners of war will not be conspicuous resistors. Therefore, some provision must be made for deviations. However, it makes clear what is expected of a serviceman. It implies that in war the hazards and risk of death are grave, as a captive as well as on the battlefield. It implies that collaboration is equivalent to running from the enemy, or of treason. It implies that prolonged or complete resistance will be viewed as heroic and that he who resists will be accorded the honors of a hero. Moreover, collaboration will make a man liable to court martial, punitive measures, social disapproval, disgrace, and even imprisonment or death when misbehavior is sufficiently flagrant. In short, it further defines what is expected of a man, what ideals he is to hold for himself, how leaders must behave so that their charges may see proper example. "To the utmost of my ability" is not to be read as acceptance of meager effort, and not as excuse for opportunism.

From what has been said, it follows that proper instruction and preparation can constructively modify that great group of the population whose attitudes and behavior need to be developed as defense against the destructive effect of collaborator and captor, alike.

In brief, every service man's understanding must include: (a) *what a man is to expect* as a prisoner of war, both as to the procedures to be used upon him, and how they will affect him; (b) *what is expected of a man* as a prisoner of war by his own people in the way of resisting collaboration despite attempts to make him feel alone, insecure, rejected, and forgotten and despite deprivations, discomforts, pain, and hunger; (c) why there is danger in talk; (d) what are the major Communist values, attitudes, objectives, and methods and why they are inimical; (e) that the most important protection against these methods are firm military discipline, convictions, loyalty, and mutual trust in fellow Americans; indeed that the very essence of esprit is the shared feeling of commitment; and (f) that, furthermore, such commitment mobilizes the individual's defenses against disease and enhances his chances of survival during periods of duress.

In addition, of utmost importance is the continued support and encouragement to the prisoner that can come from his home government, continually reminding him that he is not alone, nor forgotten, that the battle against his enemy is aggressively pressed, and that his country and his loved ones are eager for his return. All steps must be taken to communicate with the prisoner of war. In Korea no attempt was made to drop food or medical supplies to the camps; no inspirational leaflet drops were made. In fact, a satisfactory mail system was not evolved until after "Big Switch" occurred.

Obviously the Armed Service alone cannot meet all the requirements of the crisis of war. Somewhere along the way, and long before a youth becomes an adult he must have learned the need for commitment: for convictions, loyalties, and direction. He must have acquired the point of view that enables him while enjoying the comforts, luxuries, elaborations, and elegances of an opulent society, to appreciate that these are not essential to life; that during periods of crisis man can live adequately on monotonous and limited amounts of badly cooked and unfamilar foods, without bathing or soap, with little sleep, deprived of sexual outlets, in unattractive, wet and unclean clothes, that he can be warmed by coarse materials or the close proximity of human beings, that medicaments, nursing care, and physicians are able to supplement natural processes but do not constitute health; that long marches, feeling continually cold, unattractive odors, crowding, poor ventilation, vermin, pain, dirty surface wounds, handcuffs, and shackles are all compatible with survival during a crisis, and with the subsequent resumption of a comfortable, esthetically developed and cultivated life; in short, that the capacity for survival of the highly motivated man is incredibly great. Until such times as humanitarian codes of behavior are universally adhered to, he must be prepared to meet brutality and endure much suffering for his beliefs. He must know that the committed man's loyalty has no breaking point.

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Achievements of Women in Medicine, Past and Present—Women in the Medical Corps of the Army*

By
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LINCOLN'S lifetime saw the quest for many freedoms, which included not only the emancipation of the slaves, but the efforts made by women to attain the freedom to think and take part in the social and economic life of our vast and fast growing country. It is therefore, most fitting and proper, on Abraham Lincoln's Birthday, that we talk about the achievements of women in medicine during and since his time.

Those were the days of Pasteur, Lister and Koch—the decline of the old empiric medicine and the beginning of modern scientific medicine. Through the tremendous humanitarian work in nursing the sick and wounded soldiers during the Crimean War, Florence Nightingale (1820-1910) convinced England of the importance of specialized training for nurses. This experience led to the founding of the first school of nursing at St. Thomas Hospital, London, in 1860. Subsequently she was invited to undertake the reorganization of the medical department of the British Army as well as the establishment of a health commission for India. Thus, she became an authority and a frequent consultant on the construction and administration of hospitals in Great Britain. Her influence became felt over Europe as well as the United States.

Medical Education in the United States in those days was far from adequate. When Elizabeth Blackwell (1821-1910) sought admission to a medical school, she was refused by all but one medical college in Geneva, New York. Even so, this school accepted her as a joke by the vote of the students, and closed its doors to women immediately after her graduation in 1849. Fortunately, Western Reserve University of Cleveland, Ohio, was more charitable. It graduated her sister Emily Blackwell in 1854, and her friend, Marie Zakrezewska, in 1856.

History tells that these early graduates were of fine fiber and full of energy and zeal. They had a tremendous influence, not only in this country, but in Europe as well. Because of the inaccessibility of medical education to women, these pioneer women physicians were stimulated to found a number of Women's hospitals and medical schools in New York, Boston, Philadelphia, and Chicago during the latter part of the nineteenth century. In New York, Elizabeth Blackwell opened the Blackwell Women's Infirmary and later the Women's Medical College with her sister as dean. Her encouragement and aid were influential in stimulating other women to the study of medicine. It was through her assistance that Marie Zakrezewska, a Polish noblewoman and a former professor of midwifery in a medical school in Berlin, was able to get her degree in the United States. This emigré became the Professor of Obstetrics at the Samuel Gregory Medical School in Boston in 1861-63. She later founded the New England Hospital for Women. The Blackwell sisters, Elizabeth and Emily, also encouraged Ann Preston to found the Women's Medical College in Philadelphia in 1850.

As was the custom in those days, Elizabeth Blackwell went to Europe for post-

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EDITOR'S NOTE: Five women physicians are now on active duty with the Army, four of whom are in the Regular Army. There are seven women physicians on duty with the Navy.

graduate study and came in contact with some of the great medical men of England and France. While in Europe she became a close friend of Florence Nightingale and came in contact with such great minds as Lord Byron, John Stuart Mill, Herbert Spencer, George Elliott, Rosetti, Kingsley, Josephine Butler, and Elizabeth Garrett. She was thus able to influence legislation and thinking for higher education for women, not only in medicine, but in social sciences.

Acceptance of her medical diploma from the United States led to licensure to practice medicine in Great Britain in January, 1859. Subsequently during the seventies and eighties, she practiced in England and Scotland, also lectured and wrote books on hygiene and public health. Through her pioneering, Elizabeth Garrett and Sophia Jex-Blake, both Britishers, also obtained their medical degrees and thus became the pioneer medical women in Great Britain. With Dr. Blackwell's help and encouragement, they founded the John W. Garrett Anderson Medical School and Hospital for women in London in 1874 and later the first Women's Medical School and Hospital in Edinburgh. Because of her efforts Elizabeth Blackwell is credited with the opening of the British National Medical Examinations to female candidates applying for a degree to practice medicine in Great Britain.

Because of the enthusiasm of these pioneer women and the encouragement given them by the great medical leaders of the era, the early training of the women in medicine in the first two schools in New York and London, was certainly as good and perhaps better even than in Zurich, Dublin, or Paris. However, in her book, *Pioneer Work in Opening the Medical Profession to Women,* published in 1895, Dr. Blackwell suggests that the road would have been smoother in New York, had the noted southerner and popular gynecological surgeon, Marion Sims, been as generous and liberal to medical women as the other great medical leaders.

At the outbreak of the Civil War, our nursing services were in the same deplorable condition as those of the English in the Crimean War. Elizabeth Blackwell, with Dorothea Dix as superintendent of nurses undertook to help Dr. Mary Walker and Clara Burton to organize the nursing services for the Northern Armies.

Clara Barton (1821-1912) served in 16 engagements and spent eight months with the army at the siege of Charleston. Because of her great services on the battlefields, in camps and hospitals, she came to be known as the "Angel of the Battlefields" just as Florence Nightingale was known as the "Lady of the Lamp" among the British troops. After the Civil War she went to Switzerland for a long-deserved rest. While there, however, she became interested in the German Red Cross and volunteered for service in the Franco-Prussian War (1870-71). After her return to the United States in 1873 she began a campaign and finally succeeded in persuading Congress and the President to ratify the Geneva Treaty for the care of the wounded. She then organized and became the first president of the American Red Cross, which later associated itself with the International Red Cross. At the time of the Spanish-American War, at the age of 77, she chartered a ship with supplies for the needy troops and civilians in Cuba. Dr. Barton met with a great deal of opposition. But the condition of the troops was so bad that her help finally won the respect and gratitude of the military.

Dorothea Lynde Dix (1802-1887), though known for her efforts as superintendent of nurses during the Civil War, is particularly remembered for her crusade for prison reform and her efforts to discourage the housing together of the criminals and the insane. After successfully influencing legislation in Massachusetts, she traveled over most of the states east of the Rockies by stage coach and worked diligently to promote legislation for the founding of mental hospitals. Her crusade also carried her to Great Britain where she gained the title of the "American Invader." However, she succeeded to persuade Queen Victoria to appoint a Royal Commis-

sion to study the lunatic asylums of Great Britain. Due to her efforts the Scotch System for the care of the mentally ill was established and adjudged the best in the world. She also persuaded the Pope in Rome to build a special hospital for the insane.

Dr. Mary Edwards Walker (1832-1919) served as nurse in the Union Army until 1864 and then was commissioned as Assistant Surgeon—the first woman so honored. Her colorful career is steeped in much fact and fiction. She was said to have been a spy for the North, attached to the 52nd Ohio Infantry, between March and August of 1864, taken prisoner, and exchanged for a male soldier. In the Army she dressed like her brother officers and continued to wear male attire after her resignation. This brought her many vexations, including arrest for "masquerading in men's clothes." Before the Civil War she was not well known, but after the war, she became not only known for her war services, and her eccentricities in dress and appearance, but for her diligent crusade in politics and for the rights of women. She was proud of a bronze medal given her by Congress for her war service; however, this medal was rescinded in 1917 because it failed to be recorded in the Archives of the War Department.

At the outbreak of the Spanish-American War, Dr. Anita Newcomb-McGee of Washington, D.C., had just completed the organization of the Daughters of the American Revolution as well as the nursing corps as part of this organization. Although Dr. McGee was then only 33 years of age, Surgeon General Sternberg was greatly impressed by her maturity of mind and called upon her to organize a nursing corps for the Army. Given the rank of Acting Assistant Surgeon gave her the authority to organize and select some 2,000 nurses. Her nurses served in the Spanish-American War, the Philippine Insurrection, the Boxer Rebellion, and later with the Japanese Army during the Russo-Japanese War in 1904. Dr. McGee received numerous war medals from Japan and many citations for her undertakings through the American Red Cross. By the time of World War I, the nurses had been united into a strong national organization. However, Dr. McGee's high standards and system of selection remained unchanged until the reorganization of the Army Nurse Corps in 1947. Great credit is due to Dr. McGee for dignifying the nursing profession in the eyes of the military services of the United States.

It became impossible for the world to deny the accomplishments of these pioneer medical women. Their acceptance and recognition influenced co-education in the medical schools of this country and this was followed by a gradual absorption of the Women's medical schools. An excellent exception is the Woman's Medical College of Pennsylvania which has continued to this day, and ranks with the best medical schools in this country.

These early women were leaders in medical education. Elizabeth Blackwell raised the teaching of Hygiene to a plane equal to that of Obstetrics and Surgery. Dr. Marie Zakrezewska was first in making a specialty of the practice of Obstetrics. Bertha Van Hoosen, Professor of Obstetrics in Chicago and a famous surgeon, introduced obstetrical analgesia by being the first to use "Twilight Sleep" in the United States. I have had the good fortune to know this great woman. Besides her many medical publications, her readable biography entitled "The Petticoat Surgeon" has been translated to many languages. I have also know Rachel Yarros, a Professor of Obstetrics and a pioneer in premarital counciling and birth control in Chicago. Among other medical educators could be mentioned Mary Putnam Jacolie and Frances Emily White who were recognized as great teachers of medicine in New York. In Philadelphia, Anne Preston proved to be a great and resourceful administrator and dean. She was followed by Rachel Bodley, Clara Marshall and Martha Tracy. Also included among the educators were Dr. Rosalie Slaughter-Morton of New York and Elisha Mosher, Department of Hygiene, University of Michigan. Later came Elizabeth Bass, Professor of Pathology at Tulane; Alice

Hamilton, University of Michigan and Harvard, pioneer in industrial health and hygiene; Martha Elliott, Chief of the U. S. Children's Bureau; Catherine MacFarlane, Professor of Gynecology and Obstetrics in Philadelphia, known for her pioneer work in the early recognition of uterine cancer. Maude E. S. Abbott, Professor of Pathology in Philadelphia and Toronto pioneered in the study of congenital heart disease. Maude Slye, University of Chicago, spent most of her life time establishing experimentally an inheritance factor in cancer. Although not in this country, Marie Sklodowska Curie (1867-1934), the Polish-born Nobel Prize Winner in Chemistry must be mentioned for her work in the isolation of radium from pitchblende; the pioneer work in radium therapy marked further revolutionary advances in science. Also worthy of mention are Dorothy Reed (Hodgkin's Disease); Margaret Lewis (cytology); Florence Sabin (hematology); Gladys Dick (Scarlet Fever); Rebecca Lancefield and Ruth Tunnicliff (streptococci); Florence Seibert (chemistry of the tubercle bacilli); Alice Evans (undulant fever); Josephine Neal (meningitis); Anna Williams (diphtheria); and many others.

At the beginning of World War I, in 1915, Dr. Bertha Van Hoosen founded the American Women's Medical Association. As its first president, Dr. Van Hoosen organized a War Service Committee with offices in New York. Since Dr. Rosalie Slaughter-Morton of Virginia had become known as an organizer of health programs for the Federated Women's Clubs, she was chosen as the chairman. This committee became known as the American Women's Hospitals and has continued as a service organization under the capable and dedicated leadership of Dr. Esther Pohl Lovejoy, to this day. The organization has raised funds and provided doctors, nurses, technicians, and supplies for emergency use. Working alone, or complementing the Red Cross and other service organizations, The American Women's Hospitals has been a tremendous force for peace in the care of devastated and war torn peoples all over the world. It was a source of great inspiration to me to talk to Dr. Esther Lovejoy whom I visited recently in her small office in Radio City, New York. Her enthusiasm, great vision and hope enlightens her ageless beautiful features and belie her chronological age, as she talks of the charitable and humane health program which she helped to carry to many backward areas of this country as well as the far reaches of the world. She has written numerous articles and a number of books dealing with her work. She has refused to accept but a small stipend for her services and has used the proceeds from the sale of her publications to supplement contributions and to help the financing of the work of this organization. She is one of our living pioneers.

Many medical women volunteered for service in World War I. Dr. Rosalie Slaughter-Morton was commissioned by Colonel Randolph Kane in 1917 to take supplies to Serbia. Dr. Olga Stasny of Nebraska worked for the Red Cross, the American Women's Hospitals, and the Army in Czechoslovakia and Greece. She received numerous decorations and medals for her efforts. There were many others.

It is prophetic, however, that in spite of the record made by women physicians in the years past, they were still not welcomed into the Military Service except as contract surgeons at the onset of World War II. In 1939-40, a legislative committee was organized by the American Women's Medical Association to propose a bill to commission women physicians in the Medical Corps of United States Army. Dr. Emily Barringer, then a New York State representative to the American Medical Association was chosen as chairman. Having just come back from an International (John W. Garrett) fellowship in Europe, I was invited to gather factual data for this committee. Through the efforts of this committee and the help of many national women's organizations, as well as the backing of the American Medical Association, Congress passed legislation in April, 1943. The bill effective for the duration of

the war plus six months, authorized a temporary commission in the medical corps, to qualified women physicians. However, by the time the bill was passed, a few women physicians had already joined the Women's Army Corps. These were given the opportunity to transfer to the Medical Corps. The Navy had also accepted a number of women physicians in the WAVES and this status continued unchanged until permanent legislation was passed in 1952.

Among the first commissioned was Major Margaret Craighill from Philadelphia and dean of the Women's Medical College of Pennsylvania. She was assigned as special consultant to the Surgeon General. Major Margaret Janeway, Trenton, New Jersey, accompanied the first WACs sent overseas to Africa. Her studies and recommendations were used as a standard for health provisions for women soldiers overseas. I also was among the first group commissioned in July 1943. Assigned as a pathologist, I was sent to the Army Medical Museum in Washington, and later to a general hospital and overseas.

During World War II, 75 women served in the Medical Corps of the Army, and 35 served in the Navy. Most of the women medical officers were utilized in accordance with their training. For instance, the 239th General Hospital, which saw service in France (1944-45), was unusual in that it had assigned to it four women medical officers. Captain Jessie Reid, from New Jersey, was Chief of General Surgery, since there was no need in our unit for her special qualifications in Obstetrics and Gynecology. Dr. Reid was the only married woman physician in the unit. Her husband, in a strategic position, and two children were at home. I admired her fortitude which was assuaged by daily and long letters to her family. Captain Bronislava Reznik, from Chicago, trained in Otolaryngology, was assigned to her specialty. Captain Seno, recently graduated from Wisconsin and without specialty, was assigned to general ward duty. I was assigned as Chief of Laboratory Service. The 239th General Hospital while in France was distinguished by being chosen as an Infectious Hepatitis Center. The results of the clinical and laboratory studies were the subject for subsequent publications.

In 1947, Surgeon General Raymond W. Bliss was suddenly confronted with a threatened termination of the commissions of several women physicians who were still on duty. Only four still remained. Major Eleanor Baldwin Hamilton was Chief of Obstetrics and Gynecology at Letterman General Hospital in California. Major Genia Ida Sakin, a plastic surgeon, was stationed in Berlin. Major Poe-Eng-Yu, sister-in-law of Lin Yu-Tang, famous Chinese philosopher, was stationed at Valley Forge General Hospital, in Pennsylvania. I was then Chief of Laboratory Service at Tripler General Hospital in Hawaii.

At about this time General Bliss was in the Far East. When he stopped in Honolulu en route, he assured me that his staff was making every effort to retain these women officers. The possibility occurred to transfer us to the Women's Medical Specialist Corps. At the request of General Bliss, Colonel (later Major General) Paul I. Robinson, Chief of Medical Personnel wrote a letter to the Armed Services Committee to this end. I quote excerpts of this letter which was in my personal file:

". . . These officers are practicing physicians and surgeons who have served the Medical Department with distinction during World War II. They possess special qualifications which render their retention on active duty greatly to be desired. The approval of the recommendation made herein, if granted, will not be construed as a precedent, however, for appointment of female physicians and surgeons in the Women's Medical Specialist Corps. The purpose of this exigency is solely to make it administratively possible to retain the services of these officers during the present crucial period when the Medical Department is confronted with an acute shortage of medical officers."

Regardless of the efforts made, the women

physicians were relieved from duty. I accepted a commission in the Women's Medical Specialist Corps in a reserve status, not on active duty, even though in so doing I was reduced in rank from Lt. Colonel to Major.

In 1950, a provision was found to admit medical women for extended active duty in the reserve. This made it possible to recall and recruit them. Among those recalled for the Korean Conflict were myself from Dayton, Ohio; Major Alcinde De Aguiar, Newark, New Jersey, a psychiatrist; Major Theresa T. Woo, a pediatrician. Among the first to volunteer were Captain Ruth Miller of La Crosse, Wisconsin, a neurologist and Major Ruth Church of Wadsworth, Wisconsin, a specialist in Public Health. There were 23 women physicians on duty with the Army during the Korean War.

Major Alcinde De Aguiar and I were sent to Japan. Captain Miller was also sent to the Far East. Major Ruth Church and Major Woo were assigned to the Preventive Medicine Section of the Office of the Surgeon General in Washington. The latter two undertook the study of the civic health of occupied countries.

While stationed in Tokyo, Osaka and Hiroshima, I had the rare opportunity to come in contact with many Japanese physicians, present papers, and organize lectures and meetings with the Japanese. I was also invited to speak to the 38th Parallel Medical Association in Korea, in the Spring of 1952. As a result of my contacts, I was made an honorary member of the Japanese National Society of Pathologists and later co-authored a Japanese Textbook of Histopathology, published in Tokyo in 1956. In 1951, I had a chance to review the material from the early deaths of Epidemic Hemorrhagic Fever and compare the pathology with what I had previously known, in work I had done in Leptospirosis. I was also given the opportunity to study the liver biopsies taken in a nutritional study of Infectious Hepatitis. While assigned in Osaka in 1952, my laboratory made a survey of the incidence of parasites in the casualties evacuated from Korea. While in Japan I also had the opportunity to observe the work done by the Atomic Bomb Casualty Commission in Nagasaki and Hiroshima.

Major De Aguiar, now a prominent psychotherapist practicing in Boston, was assigned to a large psychiatric hospital in Tokyo. She was so successful in restoring back to duty to Korea some of the psychotic soldiers, that she was accused by some unbelieving colleagues of performing "hocus pocus" with her patients. She finally gained recognition and approval for her work. But did not succeed in her plea to an assignment close to the fighting front.

Permanent legislation to enable women physicians henceforth to enter the service with the same rights and privileges afforded their male colleagues was passed in 1952. The highest rank attained, so far, by women physicians in the Army has been that of lieutenant colonel. The Navy has now on duty a number of women physicians in the grade of Captain, USN. This is the equivalent of Colonel in the Army. Can it be that the women in the Navy have had smoother sailing?

In summary, may I tell you about yet another dedicated woman physician—Emma Wheat Gillmore who served in World War I. After the death of her surgeon husband in the early part of World War I, Dr. Gillmore served as Active Assistant Surgeon in the U. S. Public Health Service at Chattanooga, Tenn. Later, at the request of Dr. Franklin Martin, Chief of the Volunteer Medical Corps, U.S.A., she went to Washington as chairman of the Medical Women's Executive Committee, Council of National Defense. She remained a devoted admirer of the Military Service and often spoke of the high caliber of the Medical Corps. She was a proud member of the Association of Military Surgeons. In spite of a lack of precedent, she insisted on making a substantial bequest to the Surgeon General's Library shortly before her death.

In recommending a woman physician who was applying for a commission in the Medical Corps of the U. S. Army in 1943, she stated that her service in World War I, gave

her a sympathetic understanding of the difficulties which often present themselves when medical men and women attempt to collaborate in the regimentation of Government regulations. It is befitting that excerpts of her letter be repeated here, since her remarks personify many professional women. I quote Dr. Gillmore, as follows:

"From my point of view I believe that Dr.—— is eminently fitted morally, mentally and physically to make a satisfactory associate in the Army Medical Service.

First: She is inspired to apply for a commission from a high sense of patriotism.

Second: Morally she is beyond suspicion.

Third: She has a keen sense of professional ethics.

Fourth: She is sexless as far as her professional life is concerned.

Fifth: On social matters she is emotionally stable and impersonally just; coupled with these qualifications of feminine sympathy which are the inalienable heritage of every normal woman.

Sixth: Of course the Army will determine for itself Dr.——'s physical condition. So far as I know she possesses a robust physique which will readily adapt itself to whatever environment she may be assigned.

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The Application of Insight in Its Relationship to Mental Health

By

LEO H. KASHE, M.D., AND SEYMOUR G. KLEBANOFF, PH.D.*

PSYCHIATRY during the past decade has made noteworthy progress in the therapy of mental illness and with the advent of the newer drugs, there has developed an increased interest in the prognosis of the mentally ill, more particularly, The Schizophrenias. It is comprehensible when realized that this category is the most predominant and constitutes the largest population in mental hospitals. Furthermore, the tendency of schizophrenia toward chronicity, its progressive nature and regressiveness has always been considered with concern.

However, despite the general seriousness of the illness, there are also favorable factors in relationship to improvement or recovery such as the presence of strong affective qualities in the patient, well-defined precipitating factors, and long remission periods between acute phases of the illness.

Comparatively, little formal investigation has been done regarding insight in the mentally ill. In our study, it was early noted that generally, patients with insight appeared to suggest a more favorable prognosis in terms of greater frequency of Trial Visit than those without insight. In addition, they seemed to be more outgoing and less seclusive. Beyond this, they appeared to show more resonant interpersonal relations with others and to inspire in others more empathy than patients without insight. In other words, insight seemed to exert a favorable therapeutic influence on the patient in addition to helping him in forming a healthier relationship with others.

We have adopted the definition of insight as stated by Noyes[1] "By insight, one refers to the extent to which the patient is aware that he is ill, that he recognizes the nature of his illness and understands the special dynamic factors that have been operative in its production. It refers to the patient's ability to observe and understand himself—the extent of his self-knowledge."

In this study, it was incidentally noted that in not a few of the patients with insight there was a resonant or outgoing quality or feeling-tone present. This relatedness or empathy was not often present in the group without insight. This factor can best be described as a Chaleur—a natural warmth. Forty-four percent of the patients with insight manifested this quality in our study, compared to 12% of the patients without insight.

A series of fifty young male schizophrenic patients were studied in order to determine whether insight was a factor toward Trial Visit or Discharge—all the patients were admissions to V.A. Hospital Montrose during a 5-year period. These patients were diagnosed by the psychiatric staff as having schizophrenia. They had been hospitalized in mental hospitals a minimum of 3 years and ranged in ages between 22 and 38 years of age. Their illness was considered to be of chronic duration and in addition, they were all patients on the Continued Treatment Service.

To further study the value of insight in relationship to improvement, one-half of this group was selected as having insight into their condition. In this group considered to have insight, it was noted that insight into the illness was present early during their hospitalization. This was noted to be present considerably before being staffed for Trial Visit or Discharge.

A group of psychiatrists were requested to submit a list of patients from their wards who were clearly with or without insight.

* Veterans Administration Hospital, Montrose, New York.

They were also specifically requested to disregard the severity of symptoms other than insight. This would serve to eliminate bias relative to prognosis. Of the groups selected by the ward psychiatrists, each patient was interviewed to make certain that he met the selection criteria mentioned previously. On this basis, it was necessary to discard certain cases since they did not meet with the experimental criteria. The findings of this group of twenty-five patients considered to have insight were compared with the second group of twenty-five patients who were considered to have no insight into their condition. Extremes of the presence or absence of insight were utilized in the selection of the patients in order not to contaminate the group with borderline selections. While it is recognized that Trial Visit or Discharge is not necessarily a definite index to recovery, nevertheless it was believed that it could be reasonably assumed to be a criterion for evaluating improvement, even if it did not necessarily equate with recovery.

A group of twenty-five patients with insight (Group I) showed the average age to be 28.8 years, the oldest was 38, the youngest 22. The average approximate age of onset of illness was 24, the oldest in this group was 30 and the youngest 17 years. Four patients (16%) had a domineering parent. Two patients (8%) had mental illness in other members of the family. Eight patients (32%) showed sexual maladjustment and twenty-one patients (84%) had auditory hallucinations. Of these, four (16%) had both auditory and visual hallucinations. Eighteen patients (72%) had ideas of reference and in four (16%) there was a known precipitating factor. Seventeen (68%) showed a seclusive personality before their illness and seven (28%) showed an outgoing personality. One was a cyclothymic personality. Eight (32%) had a history of alcoholism and one patient was both alcoholic as well as a barbiturate addict. Three patients (12%) had made at least one suicidal attempt and the same number had suicidal ideation and had made no attempt. Eighteen patients (72%) had received convulsive therapy (electric shock therapy, insulin, metrazol). Of these, one half had shown temporary improvement, none had shown sustained improvement with this therapy. Eight patients were placed on Trial Visit (32%). Fourteen patients (56%) had shown assaultive behavior during the course of their illness. Twenty-one (84%) were single and 16% were married. Eleven patients (44%) had affect or feeling tone.

The group of twenty-five patients without insight into their condition (Group II) showed the average age of 29.7 years, the oldest being 38 years and the youngest 23. The average approximate age of onset of the illness was 25 years, the oldest being 35 years and the youngest 17 years. Eleven patients (44%) had a domineering parent, two (8%) had mental illness in other members of the family. Five (20%) showed sexual maladjustment, twenty (80%) had auditory hallucinations and of these, five patients had both auditory and visual hallucinations. Fourteen patients (56%) had ideas of reference. Six (24%) had known precipitating factors. Twenty-one (84%) showed a seclusive personality. Two (8%) had an alcoholic history. Three (12%) had made at least one suicidal attempt. Four (16%) had suicidal ideation. Nineteen (76%) had received convulsive therapy. Of these 7 showed temporary improvement. Three patients (12%) were placed on Trial Visit. Twenty-two (88%) showed assaultive behavior. Twenty (80%) were single and five (20%) were married. Three (12%) were considered to show feeling tone, 88% showed no feeling tone.

An insight questionnaire was devised by the authors in an effort to attain additional independent and objective criterion of insight (see Table 1).

Several additions occurred to the authors after the questionnaire data was finally obtained. These were essentially elaborations of the original questions. This would have yielded some additional corroborative data. For example in question No. 1, one might have added, "How long ago was it?" Or in question No. 4, the following addition could

have been included. "Were you mentally ill on admission to the Hospital?"

TABLE 1

QUESTIONNAIRE

1. Why was it necessary for you to come to the hospital?
2. Did you want to be hospitalized at that time?
3. Are you in need of treatment?
4. Are you mentally ill?
5. Have you ever suffered from any mental disorder?
6. Has there been any change in yourself or in your outlook toward life?
7. Has there been any change in your feeling or interest?
8. Has there been any change in your memory or thinking?
9. Do you desire to be hospitalized?
10. Have you done anything to adjust to the situation?

The content of the questionnaire was predicated upon various levels of insight. The questionnaire was administered to the two groups of patients and verbatim responses were recorded. The test blanks were then coded and submitted to four raters who were asked to rate blindly. The presence or absence of insight in each patient involved only the questionnaire responses. Two of the raters were psychiatrists and two psychologists. All raters showed significant agreement with the initial psychiatric evaluation of insight. Two raters showed a level of 79% agreement with the psychiatric examination and the remaining two raters showed an 82% level of agreement with the initial criteria. The average agreement of all four raters with the psychiatric examination was 80.5%.

The reliability of the questionnaire was next studied by examining the amount of agreement of the four raters with each other. This is technically referred to as inter-judge reliability. It should be noted that in all cases there were either three or four ratings in agreement. There was never more than one deviation in any of the four ratings. The general conclusions from the questionnaire study are that the questionnaire does constitute an objective and independent measure of various dimensions of insight. Secondly, blind ratings from the questionnaire agree significantly with the independent judgments of insight by the psychiatrists.

CONLUSIONS

Preliminary comparison of the two groups reveals the following developments which appear worthy of further study:

1. Patients with insight tend to have less incidence of domineering parents than those without insight. A possible dynamic hypothesis could be made that a highly domineering parent tends to inhibit the development of independent thinking which may be considered a necessary component in the development of insight. A highly domineering parent tends to control the thinking of the individual, thereby inhibiting the development of independent thinking which is basic to insight.

2. Patients with insight tend to show a greater frequency of incidence of sexual maladjustment as compared to patients without insight. This is probably a casual finding in that patients with insight simply tend to be more critical and sensitive concerning their own adjustment level and are more inclined to discuss sexual difficulties such as impotence, adult masturbation, homosexuality, extra marital relationship, etc., in relation to symptoms. It is felt that most probably the occurrence of sexual maladjustment among the patients without insight is just as frequent, but that these patients lack the introspection necessary to comprehend or discuss such relationships.

3. Patients with insight tend to show greater frequency of ideas of reference than patients without insight. Since the patient with insight is generally considered to be more aware of his environment, he has a greater tendency to be preoccupied with his personal role in relationship to events about him.

4. Results indicate that patients with insight tend to be more outgoing or less seclu-

sive than patients without insight. Again, it is hypothesized that patients possessing insight tend generally to be more secure than patients lacking insight. Accordingly such patients tend to show less withdrawal from the environment.

5. Patients with insight show greater frequency of use of alcohol than patients without insight. This could be explained in terms of the use of alcohol as a technique for alleviating felt anxiety. To this degree, the use of alcohol is a relatively socially acceptable technique for dealing with anxiety.

6. Patients with insight show less frequency of assaultive acts as compared with patients without insight. It would appear that patients with insight do not tend to misinterpret their environment or those about them to the extent that this occurs in patients without insight. That is to say, patients with insight show a higher level of control and are less threatened or fearful of the environment. Thus they are better able to control emotions.

7. Patients with insight tend to show warmer, more resonant interpersonal relations with others and inspire in others more empathy than do patients without insight. Again, with insight there appears to exist a greater level of emotional security, so that patients with insight will manifest more appropriate interpersonal relationships with others.

8. Patients with insight tend to show a significantly greater frequency of Trial Visit achievement than do patients without insight, which appears to suggest that prognosis is more favorable in patients who are considered to possess insight relatively early during their illness.

Summary

1. A series of young male chronic schizophrenic patients was selected for study to determine whether insight was a factor toward Trial Visit or Discharge. One half of the group was selected as having insight, the other half was considered to have no insight. Extremes of the presence or absence of insight were utilized in the selection of patients in order not to contaminate the group with borderline selections. The findings of the two groups were compared and an evaluation of the two groups is outlined, an insight questionnaire is described.

2. Since the insight group showed less assaultiveness, therefore a lesser number required a maximum security building, in addition since this group was less seclusive, this factor could consequently be utilized in designating them to group activities.

3. Therefore, not only does the presence of insight appear to be a valuable prognostic factor in mental disease, but may be utilized pragmatically, in an accelerated therapy planning program.

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Mental Conditioning of the Soldier for Nuclear War

By

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MUCH has been written about nuclear weapons, their effects and their application to war. But little has been done to discern the psychological impact of these weapons on the human beings who operate on the battlefield. No noticeable effort has been made to evaluate the effect on the commander and on his decisions pertinent to the reaction of his men to this new type warfare.

It is difficult to assess what man's reactions will be to a weapon for which no precedent exists on the battlefield. We can only attempt to guess—based on past experience with pre-nuclear weapons—how man's actions will be influenced.

Thinking of the soldier from the time he enters the service, the question arises how he will react to nuclear weapons training. It seems apparent that the degree of his knowledge, pre-service acquired, will influence his reaction to training. At present there still exists a deep nation-wide apprehension about the use of any nuclear weapons. It seems safe to estimate that the bulk of all enlistees and draftees are possessed in varying degrees with this apprehension.

It is worth investigating whether indoctrination of a less detailed nature would be desirable. During the last war we did not specifically teach our troops the blast and fragmentation effect of artillery weapons. They learned about these by experience, having been taught at an early stage of training that it was wise to take certain protective measures against shell fire, such as getting into foxholes, lying prone on the ground, and getting behind walls or in ditches. The degree of effectiveness of such countermeasures should be clearly indicated. It would be a worthwhile research project for the Human Resources Research Office, or a similar scientific group at the Army's disposal, to determine whether such an approach to training would lessen the likelihood of severe fear and terror reaction to threatened nuclear attack.

As the result of the continued threat of, or actual use of, nuclear weapons, what considerations should go into a training program to take care of the psychological effect of nuclear weapons? There is little doubt that many of the training objectives we used to strive for in past wars, must again be achieved, but more completely.

We must have our men physically toughened so that their stamina will support them when their psychological post-strike shock sets in; their toughened condition also will help them to face successfully the challenge of survival on the devastated battleground.

The men must be better prepared to "take it" and to sacrifice all, if necessary, for the sake of the cause for which they fight. To put this differently, a national revival must take place which will return to our young people the beliefs in God and country, the dedication to the free world's cause, the love of our way of life, and a willingness to sacrifice all for it—a philosophy which made the early settlers survive and succeed against odds which must have looked hopeless to them many times. This task of toughening the moral fiber is one to which the Army can only make a small contribution because the groundwork must be laid in the homes, the schools and the churches of this great nation. Nevertheless this is an area where appropriate information and education activities can make significant progress.

Our training must be directed at greater development of individual confidence, initiative, and self-reliance. The present tendency

† The opinions expressed herein are those of the author and are not to be construed as representing those of the Department of Defense or the Department of the Army.

Colonel Rand died recently.

to over-supervise must be reversed and emphasis placed on individual initiative. The soldier who finds himself the senior survivor of a nuclear attack must readily and confidently step into the vacated leadership position, able to make decisions and to lead his group to the accomplishment of their mission. This type training, down to the last man, is a tremendous challenge, time wise and ingenuity wise, to our training mission. It also may be contrary to the present desire—fully justified as it may be—to reduce training time drastically.

Psychologically, the soldier must become accustomed to being isolated in battle. The desire for recognition by the herd has helped many a weakling to continue the fight when his other instincts urged him to quit fighting. The desire not to show his weakness in front of his comrades was often stronger than the desire to quit. On the nuclear battlefield, dispersion is doctrine, and virtual isolation may often be the rule, both pre and post strike. Not only must the spiritual revival carry the soldier on to continued fighting, but his training must condition him to being alone. This latter is so completely contrary to the gregarious human instinct that it presents a great psychological, as well as practical, problem. It may be possible to overcome it eventually to some degree by establishing a communications system which will provide every individual with a means to participate—at least in a listening status—in the system. Such a radio net could become an important contribution by the Signal Corps to lightening the psychological load of nuclear warfare.

Of all the steps that can be taken to condition soldiers to nuclear weapons, one of the most effective is the observing of a nuclear test shot. Should tests be suspended indefinitely, it would be worth a good deal of effort and expense to expose troops in training to a detonation that resembles a nuclear shot as closely as possible. The intangible. indefinable fear which today is prevalent among most of our men can at least be partially allayed by the witnessing of a nuclear shot. The mere fact that one has seen and been present at a shot takes a certain amount of the mystery and awe out of nuclear explosions.

Similarly, development of small nuclear weapons which can be manhandled will contribute to a decrease in apprehension. When weapons can be placed at the battle group level, a great step toward the elimination of the psychological problem will have been taken.

Once battle is entered, the commander of even the best trained and nuclear-conditioned troops must consider the psychological effects of his and the enemy's nuclear activities.

Let us look, first, at a situation which calls for a concentration of friendly troops in

order to take some type of offensive action, be it a breakthrough of a strongly held enemy position, a river crossing in force, or a counterattack. Under the threat of nuclear enemy fire will the troops concerned be in a state of mind to give the action a maximum chance for success—or will they, at the time of the attack and when the enemy has failed to fire a nuclear weapon at them, relax from the apprehension they were under to an extent that a concentrated, intelligent effort will not be made to defeat the enemy? What will happen if a brigade is assembled for a counterattack when only last week the enemy completely destroyed a similar counterattack force (a fact well known to all troops)? Will the concern and fear and defeatism hinder an otherwise well conceived operation? It is easy to say that usually properly trained and well led troops are not subject to such reaction as that. God willing, and all our best training brains cooperating, these problems will not arise. But can we afford not to think about these questions, considering the depth of our ignorance about nuclear warfare? I believe that all potential future commanders are well advised to face such questions now. They can think of how to determine the state of morale and the degree to which the men are preoccupied with the fear of the ever present threat of nuclear weapons, and what can be done about it.

A good case can be made by those who point to the relaxed reaction to German terror weapons in World War II. The people in England went about their business in almost fatalistic disregard of the V-weapons, as did the allied military and the civilian population in Antwerp. There was no noticeable increase in mental disorders or in other manifestations of fear. The great difference appears to lie in the tremendous build-up nuclear weapons and their so-called terror characteristics have had since their first use in 1945.

The fate of the Japanese fishermen exposed to fallout from a thermonuclear explosion in the Pacific impressed people all over the world. This incident added to the panic-like dread of the invisible, hard to detect fallout. Publicized studies of the possible effects of the different types of radiation as a result of both air and ground bursts have further added to the almost universal terror and condemnation of nuclear weapons as potential destroyers of the human race. It appears that the preconditioning—for many years to come—will be a significant factor in determining the soldier's reaction.

Can a commander afford to ignore, in determining a course of action, the psychological effect of the use of nuclear fires? He may decide that a certain situation dictates that he take "emergency risk" of casualties among his own troops. This term describes a maximum level of risk considered acceptable un-

der a given set of circumstances. His action may be fully vindicated by the results. But what lasting effect may this have on his command? Will the men ever admire him again as they did previously? Will their individual morale and their esprit de corps recover from the shock suffered when many of their own number were killed by a nuclear weapon fired by their own missilemen? Will even the best effort to inform them of the circumstances surrounding the situation suffice to rebuild a unit undermined by gnawing fear and distrust? These are questions that are valid to pose now.

The commander can take one step in his thinking today which will help him after his troops have been attacked by nuclear weapons. He can develop a plan for orders he will issue at that time to get his men occupied as soon after such an attack as possible. Strenuous activity can best help the stunned, half-crazed men to regain their normalcy. This activity must be ordered promptly, must be enforced firmly, and must be in some way obviously productive so that the men regain the feeling of belonging to a unit with a mission. Preparation of earthworks, repair of equipment, or rehearsals for an attack or counterattack may be the answer. Whatever it is, it must help to restore familiar thoughts, actions, and psychological reactions in the men.

It is the author's opinion that, if nuclear war occurs in the next 10 years, the intangibles discussed above must be seriously considered by commanders; they cannot be handled by statements such as the completely inflexible stereotyped entry in the Commander's Estimate: "Morale of our Troops —EXCELLENT."

The U. S. Army Hospital in Munich, Germany (see cover) is a permanent type structure which was opened for patients on October 28, 1957. It is located in a section known as "Perlacher Forst," a part of Munich. The hospital provides medical Service for the military personnel and their dependents in the South Bavaria area of Germany. Colonel Stuart I. Draper, Medical Corps, U. S. Army, is the Commanding Officer.

The Nurse as a Part-Time Counselor

By
M. Marian Wood, R.N.

THE counseling and guidance movement started in the United States during the period from 1900 to 1910 when Frank Parsons, a Boston lawyer, established the Breadwinner's College at the Civic Service House, Boston, Massachusetts, as a vocational counseling and guidance service. In 1911 the first university course in vocational guidance was given at Harvard University. The National Vocational Association was founded two years later. The ten years from 1910 to 1920 was a test era; many psychological tests were formulated in an effort to measure aptitude and intelligence as a means for vocational guidance. During this same period wide-awake employers used psychologists to help in the selection of employees. The Psychological Corporation was organized in 1921 to give consulting service, administer tests, and provide counseling service.

In 1927 the Western Electric Company conducted an experiment which is now referred to as "The Hawthorne Study." Efforts were directed toward determing the effect of physical environmental factors on production. The research team found that consistent levels of production were maintained under both favorable and less favorable conditions. The research team was constantly working with employees on an individual basis by seeking their cooperation, considering their opinions and recognizing their contributions. Personal participation in the project gave the employees feelings of prestige and worth and this resulted in improved attitudes toward their responsibilities. The research team concluded that the *way* in which the changes were introduced was the important factor. Personalized attention has played a role in production levels being maintained under adverse conditions. This experiment has great historical significance and is cited as a milestone in employee relationships.

The Minnesota Employment Stabilization Research Institute was founded at the University of Minnesota in 1931. This period was characterized by considerable unemployment. One of the early projects undertaken was a study of employed persons to determine the characteristics of successful employment. The Institute established the value of research in the field of personnel management and many contributions were made to the world of work through research findings.

During World War II many industrial and manufacturing firms markedly and rapidly expanded. Many employee difficulties resulted. Management soon learned that morale and effectiveness on the job had a direct relationship to personal attitudes and one way to help the employee was to provide means for personalized conferences. The role of counseling came to have wide recognition and use. Many supervisors and members of personnel departments through practical experience developed insights and appreciations for the role of the counselor.

All military services were marked and rapidly expanded during World War II, also. While we were actively involved in combat, personnel within the armed services began to make plans for the role of the counselor in demobilization. As a result, the services of a counselor were made available at separation centers for all men and women to help them to help themselves to make a proper adjustment in their return to civilian life. This did much to spread the technique and the role of counseling.

These are only a few of the high lights in the history of counseling and guidance. From the days of Frank Parsons, from 1900 to the present, there have been many developments and progress in the last fifteen years has been marked. Today counseling and guidance are accepted as services which are needed wherever people work together

and personnel management principles are given recognition.

Part-Time Counselor Defined

Counseling has emerged as a profession. However, there are many professional people who are obligated to carry out a program of counseling and guidance because they act as supervisors. Such a person might be termed a *"part-time counselor."* The teacher who is essentially engaged in pedagogical pursuits but must act as a student counselor is an example of a part-time counselor. In like manner, the nurse who is concerned with a program of patient care must often act as a counselor to nursing personnel under her supervision.

Preparation of a Part-Time Counselor

All too often a nurse finds that she must embark upon the role of counselor without an understanding of accepted principles or without practical experience in the true technique of the counseling conference. Most colleges and universities have courses which are an excellent means for the nurse to obtain knowledge and skills. Also, many splendid books and articles have been written and are constantly being written which are helpful. It is important that the nurse become oriented to the principles which are accepted today as basic to the counseling process. If the nurse must be a counselor, and most nurses assume this role, then she must prepare herself just as she prepared herself to administer medications by first learning the principles and then applying these principles to the actual situation. Unless a counselor has a sound knowledge of the principles of counseling and applies these principles effectively, the problems of the counselee may be intensified.

What is counseling? What is guidance? Counseling is a process through which the counselor learns to know the counselee and helps the counselee to help himself in the prevention, betterment, or the solution of a problem, e.g., a Nursing Assistant is repeatedly late in reporting for his tour of duty. Guidance is a process through which the counselor helps the counselee to make a fitting choice or selection, e.g., a nurse is having difficulty in selecting courses for the fall term. To be noted is the fact that both definitions place emphasis on helping the individual to help himself.

Those nurses who have seen fruitful results of rehabilitative nursing know that to make progress the patient must be helped to help himself. This same philosophy may be applied to counseling and guidance. It has been difficult for many nurses to accept the theory of helping the patient to help himself in rehabilitation. The philosophy of nursing "to do for the patient" is a part of the professional life of a nurse, and this philosophy had to be changed. Likewise the nurse who teaches, assigns, guides, and directs other nursing personnel may have difficulty in counseling her personnel by helping them to help themselves. However, she must accept this philosophy.

The professional counselor needs a knowledge of:

1. Personality organization and development gained through a study of sociology
2. Community social agencies
3. Means through which the individual may be appraised
4. Counseling theory and practice
5. Personal therapeutic practice.

It is impossible to expect that all part-time counselors will have such extensive preparation. However, the part-time counselor must equip himself to adequately function in his role.

All nurses have had formal courses in psychology and sociology and almost all nurses attain a good level of educational maturity in the matter of personality organization and development through informal experience. This provides a good background for personality insight. If the nurse can learn the basic principles of counseling and particularly the counseling interview, can learn to effectively apply these principles, has an interest and a desire to aid others, she should be able to develop her own individual method for helping personnel to

define their problems and help them to work out courses of action leading to a solution.

The average nurse should develop counseling skills easier than individuals in many other professions and occupations because the application of nursing care principles goes hand in hand with meeting human needs. She is constantly helping patients to understand and solve problems with which they are faced. Also, as the professional member of the Nursing Care Team, she has had experience in establishing and maintaining good rapport and effective working relations with members of the Team in a rather intimate social association. Thus the team leader, head nurse, supervisor and others having a working knowledge of counseling and guidance principles and having well developed professional qualities should be able to assume the role of the part-time counselor and should be able to do "first level counseling."

Principles of Counseling

As has previously been stressed, the counselee must be helped to help himself in the prevention, betterment, or solution of a problem or situation and in making a proper adjustment to his role in life. The counselee by helping himself benefits from the experience because he gains in self-confidence, decision making, and personal prestige and thus is better able to meet future problems and situations.

The counselor must have adequate data in order to help the counselee, information about the counselee as a person and information concerning the area in which the problem falls. The educational background, the performance evaluations, and the interests exhibited by the counselee may reveal pertinent information for the counselor. An employee may be having difficulty in being accepted as an integrated member of the ward team and in order for the head nurse or supervisor to serve as an effective counselor she will need to know something of the elements which go into establishing and maintaining good relations with co-workers.

Elements of the conversation on the part of the counselee which are confidential should be held in confidence by the counselor. It is only when the counselor knows the whole story behind the situation that understanding and help can be forthcoming. Therefore, the counselee must have the security and assurance that he can speak freely.

For an effective discourse the atmosphere and environment should be one which will allow continuity of thought and will be conducive for the counselee to talk freely with the counselor. The frequent ringing of the telephone, a bright light in the counselee's eyes, and the apparent tenseness of the counselor's facial muscles are examples of factors which make an improper setting and the abesnce of all such elements favor a proper setting.

Counseling should not be centralized in one person or in one department. Nurses in all assignments and at all levels who assume responsibility for the teaching, supervision and direction of other nurses or Nursing Assistants need the techniques and the skills of counseling. The head nurse or the supervisor who has direct contact with the employee knows the employee as an individual and the working situation in which the counselee functions. For this reason, she is usually in the best position to sit down with the employee and first hear him out. If we accept this hypothesis, then all nurses within the nursing service must assume responsibility to prepare themselves to carry out the art of counseling. Likewise we can expect that a Chief, Nursing Service who assumes the over-all responsibility for the administration of a Nursing Service will provide the means through which nurses can learn the techniques of counseling and can have the advantage of observation, practice, and other activities for the implementation of these principles. Demonstrated ability in the area of counseling should be a qualification for assignment to a position of increased responsibility.

As has been pointed out, the nurse assumes the role of the part-time counselor. Although she will need to prepare herself, it

is not anticipated that she will reach the level of the professional counselor. The nurse then must accept the fact that she is a part-time counselor and that there are limitations to her role and an inherent scope of her effectiveness in many instances. Therefore, she must rely upon her judgment and her resources to know when and where to refer the employee for additional help. This is a common error among part-time counselors that of standing by the counselee over a long period of time when a referral should have been made at the very beginning. As would be expected, the proper referral will often bring about a quicker solution to a problem or a more rapid adjustment to a situation. Proper referral then is in the best interest of the employee and something to which he is entitled.

We are all aware that preventive medicine has played a significant role in maintaining physical and mental health. In the same manner preventive counseling is more effective than remedial counseling. If you are alert to the warning signals and make prompt use of these signals, a problem may be caught in its potential stage. As a result the employee's working life and personal life will benefit.

Nurses acting as counselors must have the patience to hear people out, the desire to help others, and an outgoing belief that always there is something which can be done to assist employees to solve a problem and to make an adjustment. Since nurses have individual characteristics, some will be endowed with more patience than others and some will be able to integrate counseling principles better than others. We should expect a wide range of demonstrated capabilities. However, all can develop understandings and attitudes which will serve them well in this endeavor and will carry them far toward effectiveness.

Principles of the Counseling Interview

What is the technique for conducting the counseling interview? The first conception which we must accept is that the counseling interview is a conversation with a purpose, providing the counselee an opportunity to reveal his attitude, problems and philosophies. It is the heart of the counseling process and the success or failure depends largely upon the skills used in this person-to-person verbalizing situation. The ultimate objective for every counseling interview or interviews is that the process of conversation will be the means through which a motivating constructive course of action will evolve for the counselee.

Whenever possible, time should be allowed to make the necessary preparation for the interview. Attention should be given to making a proper setting and collecting any information which may be needed. Whether or not the stage has been set or whether or not it has been properly set, will be sensed by the employee. Since the establishment of rapport is a primary requisite to any successful interview, the feeling of being expected and the stage of readiness are of particular importance in the human relations element of the counselee's arrival.

As mentioned above, the establishment of rapport between the counselor and the counselee is essential. The nurse, who excels in the area of patient care, works effectively with others, or who integrates herself into most groups should have a good conception of the meaning of rapport. This type of person will generally be aware of the personal resources which she has to use in bringing harmonious affinity of personalities. The means through which the plans of rapport is reached is a rather individual one but is closely related to the personality of the counselor.

Always and consistently the counselor must be a good listener and a keen observer —hear all and see all. Somewhere within the words that are spoken or the things that are observed will be the clue to the employee's problem.

It might take several interviews of patient listening and observation before the heart of the employee's problem shows itself. As the counselor listens and observes he should indicate his continued interest by an affirma-

tive nod of the head or a casual remark of encouragement. The need for the counselor to be a good listener and a keen observer is further substantiated by the fact that 75% of all those who seek counseling do not need counseling per se and get needed help by just talking to someone who will hear them out with patience and understanding.

If the employee is among the 25% who have situational problems or problems involving personality disorganization to solve, the problem must be located and identified. Here again, the employee must be helped to see and to accept his problem. It is only when this point is reached that real constructive work can begin to take shape.

It might be helpful to review the steps involved in analyzing problem situations which John Dewey formulated in 1909. Forty eight years later they still appear logical and applicable to any problem situation. Briefly, they are as follows:

1. A problem awareness
2. An analysis of the problem into subproblems
3. The formulation of possible solutions
4. An attempt to foresee the consequences of the different solutions
5. Deciding upon the best course of action.

A nurse can find helpful elements in helping counselees locate a problem and work out a solution.

Care should be exercised in the notes recorded during the interview. Unless this is observed the employee may feel restricted in his conversation. However, following the interview a record should be made so that subsequent interviews will have continuity and a history may be maintained. The content of the recording should be brief so that it can be easily reviewed. The topics discussed should be recorded in sequence. Emotional responses should be given space. The conversation on the part of both the counselee and the counselor needs to be a matter of record. A note should be made of any tentative decision or proposed plan of action. Always there should be a statement regarding the nature of the problem.

Patience on the part of the counselor has been previously stressed. Hand in hand with this is the fact that the interview must never appear to be hurried. The counselee sets his own pace. If the heart of the problem has not been reached in the alloted time, another appointment can be made.

The counselor must meet everything he hears and everything he sees with complete emotional equilibrium. The surprised look on the face of the counselor may be a severe inhibiting factor on the employee who is revealing the heart of his problem. Facial expression, gestures or words must never portray that something unusual is taking place.

If we assume that the role of the counselor is to help the employee to help himself, then we can accept the fact that the counselor will not preach to the counselee. This may be difficult for many nurses in administrative teaching or supervisory positions to accept because they are constantly giving guidance and direction. However, this principle is compatable with all other principles of the counseling interview and as such must be closely observed.

The nurse or Nursing Assistant who has a problem even though it may be in actuality a minor one, may be overwhelmed or dominated by this problem. The counselor can do much for the counselee by portraying in a rather opinionated manner that something can be done and that there are hopeful aspects as to the outcome.

It is expeced that the interview will be terminated tactfully and on a note of good will so that the counselee easily accepts the fact that it is ending but that the course of events will continue according to plans. If the counselee has accepted responsibility for some specific detail or activity prior to the next meeting, care should be taken that there is full understanding as to what is to be done.

Counseling and Leadership

We expect the nurse in supervisory, administrative and educational positions to assume a leadership role in regard to patient care, to set high standards and to attain these

standards by working through others. In realizing this objective the supervisor, administrator or nursing educator must deal with nursing personnel. Thus the nurse who must assume a leadership role is expected to guide, direct and help her personnel to adjust to their roles and to attain an acceptable level of performance. The supervisor, administrator or nursing educator then must accept her role as a part-time counselor as a responsibility of professional leadership.

Types of Conferences

There are many times when head nurses, supervisors and nurses in other assignments must talk with nursing personnel under their supervision. The purpose of the interview or conference might be to obtain additional information on a situation or problem in which the contacted person was involved directly or indirectly. An interview or conference might be set-up as a means of verbally disciplining an employee. The head nurse's proficiency rating has been rendered and the supervisor or Chief, Nursing Service talks with the head nurse regarding her total performance with respect to strengths and weaknesses. A staff nurse has demonstrated potentialities for assuming increased responsibilities and the Assistant Chief, Nursing Education in an interview talks with her concerning these potentialities and advises that she further prepare herself through advanced study. The first example denotes a fact finding interview or conference. The second example borders on a disciplinary interviews or conference. The next example demonstrates a performance evaluation interview or conference. The last example could be accepted as an educational guidance conference.

All too frequently all types of interviews have been termed "counseling." There might have been a time when this term was acceptable. But with counseling now functioning under the philosophy that to counsel is to help the counselee to help himself, we can no longer accept the concept that whenever a supervisor talks with nursing personnel under her supervision that she is counseling. We must begin to review the objectives of all interviews and conferences and label them accordingly.

Nurses are not the only ones who are misusing the term counseling or who have not kept in step with the progress in counseling and guidance. Then, too, the observance of principles of the management of personnel as a responsibility of a professional leadership has gained wide recognition only in recent years. We must look to the future for wider and wiser use of these principles including those of guidance and counseling.

Summary

This paper has given a brief history of the counseling and guidance movement, has attempted to establish the role of the professional nurse as a part-time counselor, has devoted a short space to the preparation needed by the nurse as a part-time counselor, has defined counseling and guidance as separate but related activities, has set forth some over-all principles of counseling and of the counseling interview and has pointed out that counseling is a responsibility of professional leadership. The modern concepts and philosophies have been summarized. An attempt has been made to relate principles and concepts to nursing in those instances where a specific relationship could be used for emphasis.

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EDITORIALS

Prisoners of War

A PRISONER of war's life is no bed of roses. To be captured by an enemy is a real calamity. As long as there is not an amicable resolution of problems that arise in international disputes, and so long as there are Alexanders, Caesars, Napoleons, and Hitlers, there will be an attempt to solve the problems by arms rather than by words. These conflicts make the situation for prisoners of war.

We always hope that after a war we will never be involved in another. But this fond hope has not been realized in the past and who is so naive as to think that there will be no conflict in arms in the future. We have had plenty of brush wars over this globe since the great calamity of World War II. With these conflicts come prisoners of war, property destruction, and all kinds of other problems.

So long as we have this potential axe hanging over our heads we must prepare not only with physical means to resist and to survive, but with moral strength to stand up to the threats and actions of barbarians who accost us and into whose hands some may fall. Therefore, we repeat here the CODE OF CONDUCT FOR POW'S—a code for all Americans.

I

I am an American fighting man. I serve in the forces which guard my country and our way of life. I am prepared to give my life in their defense.

A member of the Armed Forces is always a fighting man. As such, it is his duty to oppose the enemies of the United States regardless of the circumstances in which he may find himself, whether it is active participation in combat, or as a prisoner of war.

II

I will never surrender of my own free will. If in command I will never surrender my men while they still have the means to resist.

As an individual, a member of the Armed Forces may never voluntarily surrender himself. When isolated and he can no longer inflict casualties on the enemy, it is his duty to evade capture and rejoin the nearest friendly forces.

The responsibility and authority of a commander never extends to the surrender of his command to the enemy while it has power to resist or evade. When isolated, cut off or surrounded, a unit must continue to fight until relieved, or able to rejoin friendly forces, by breaking out or by evading the enemy.

III

If I am captured I will continue to resist by all means available. I will make every effort to escape and aid others to escape. I will never accept parole nor special favors from the enemy.

The duty of a member of the Armed Forces to continue resistance by all means at his disposal is not lessened by the misfortune of capture. Article 82 of the Geneva Convention pertains and must be explained. He will escape if able to do so, and will assist others to escape. Parole agreements are promises given the captor by a prisoner of war upon his faith and honor, to fulfill stated conditions, such as not to bear arms or not to escape, in consideration of special privileges, usually release from captivity or lessened restraint. He will never sign or enter into a parole agreement.

IV

If I become a prisoner of war, I will keep faith, with my fellow prisoners. I will give

no information or take part in any action which might be harmful to my comrades. If I am senior, I will take command. If not I will obey the lawful orders of those appointed over me and will back them up in every way.

Informing or any other action to the detriment of a fellow prisoner is despicable and is expressly forbidden. Prisoners of war must avoid helping the enemy identify fellow prisoners who may have knowledge of particular value to the enemy, and may therefore be made to suffer coercive interrogation.

Strong leadership is essential to discipline. Without discipline, resistance, and even survival may be impossible. Personal hygiene, camp sanitation, and care of sick and wounded are imperative. Officers and noncommissioned officers of the United States will continue to carry out their responsibilities and exercise their authority subsequent to capture. The senior line officer or noncommissioned officer within the prisoner of war camp or group of prisoners will assume command according to rank (or precedence) without regard to Service. This responsibility and accountability may not be evaded. If the senior officer or noncommissioned officer is incapacitated or unable to act for any reason, command will be assumed by the next senior. If the foregoing organization cannot be effected, an organization of elected representatives, as provided for in Article 79-81 Geneva Convention Relative to Treatment of Prisoners of War, or a covert organization, or both, will be formed.

V

When questioned, should I become a prisoner of war, I am bound to give only name, rank, service number and date of birth. I will evade, answering further questions to the utmost of my ability. I will make no oral or written statements disloyal to my country and its allies or harmful to their cause.

When questioned, a prisoner of war is required by the Geneva Convention and permitted by this Code to disclose his name, rank, service number and date of birth. A prisoner of war may also communicate with the enemy regarding his individual health or welfare as a prisoner of war and, when appropriate, on routine matters of camp administration. Oral or written confessions true or false, questionnaires, personal history statements, propaganda recordings and broadcasts, appeals to other prisoners of war, signatures to peace or surrender appeals, self criticisms or any other oral or written communication on behalf of the enemy or critical or harmful to the United States, its allies, the Armed Forces or other prisoners are forbidden.

It is a violation of the Geneva Convention to place a prisoner of war under physical or mental torture or any other form of coercion to secure from him information of any kind. If, however, a prisoner is subjected to such treatment, he will endeavor to avoid by every means the disclosure of any information, or the making of any statement or the performance of any action harmful to the interests of the United States or its allies or which will provide aid or comfort to the enemy.

Under Communist Bloc reservations to the Geneva Convention, the signing of a confession or the making of a statement by a prisoner is likely to be used to convict him as a war criminal under the laws of his captors. This conviction has the effect of removing him from the prisoner of war status and according to this Communist Bloc device denying him any protection under the terms of the Geneva Convention and repatriation until a prison sentence is served.

VI

I will never forget that I am an American fighting man, responsible for my actions, and dedicated to the principles which made my country free. I will trust in my God and in the United States of America.

The provisions of the Uniform Code of Military Justice, whenever appropriate, continue to apply to members of the Armed Forces while prisoners of war. Upon repatriation, the conduct of prisoners will be examined as to the circumstances of capture

and through the period of detention with due regard for the rights of the individual and consideration for the conditions of captivity.

A member of the Armed Forces who becomes a prisoner of war has a continuing obligation to remain loyal to his country, his Service and his unit.

The life of a prisoner of war is hard. He must never give up hope. He must resist enemy indoctrination. Prisoners of war who stand firm and united against the enemy will aid one another in surviving the ordeal.

Women in the Armed Forces

THE PART played by women in our Armed Forces has been an increasing one since the turn of the century, and particularly so with the country's involvement in World War II.

In September, 1951, the Secretary of Defense established the Defense Advisory Committee on Women in the Services (better known by its short title—DACOWITS). This organization composed of 50 prominent civilian women has as its chairman, Mrs. Neal Tourtellotte of Seattle, Washington. The purpose of the committee is: (1) to advise the Department of Defense on policies relating to Women in the Services, (2) to recommend measures to bring about a more effective utilization of the capabilities of the Women in the Services, and (3) to recommend standards for the training, housing, health, recreation and general welfare of Women in the Services.

Recently the committee has published a brochure, "For You, An Officer's Career in the U. S. Armed Forces." This brochure explains the many fields where women may serve our country. You can get your copy from the Department of Defense, Washington 25, D.C.

We recommend the military service for those women who want to serve and while serving gain experience in handling personnel, visit places of interest, and continue their training. But one word of caution we would like to give—it is not all glamour and there is work to do. If only glamour is sought better forget it all and seek elsewhere than the military service. But she who wants to serve will be well rewarded.

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Around the World

(Ser. III, No. 16)

By

CLAUDIUS F. MAYER, M.D.

PORTUGAL India will be about 450 years old during this year. It is a reminder of the great ambitions of the parent country which once hoped that Goa's harbor would make Portugal the ruler of Southeast Asia and that it would serve as a stepping stone in the conquest of the East Coast of Africa. *Portugal India* is still an important source of income for the European Portuguese, and the Government takes good care of the public health administration of this province. The *Department of Health* includes a medical, a pharmaceutical, and an administrative division each of which contains various sections. The staff of the Department is supplemented by a number of specialists and general practitioners, pharmacists, male nurses, helpers and technicians in laboratories and apothecary shops. The territory of Portugal India is divided into 16 health offices among which we find Goa, Salcete, Vasco da Gama (Mormugão), Damão, Pragana, etc. Each one is directed by a public health officer. Smaller posts are in charge of male nurses. Every one of them is provided with transportation facilities, and the health offices of the mining districts and larger towns have motor ambulances for the transportation of the sick.

Three permanent *health brigades* are at present functioning in Portugal India: the antimalarial, the antifilarial and the antituberculosis brigades. In previous years, malaria has been a great peril in the territory. For instance, the *city of Old Goa,* the most important and the most populous on the coast of Malabar, had to be abandoned because of the violent malarial attacks to which it was exposed. But today, thousands of troops are living in the old town, and not a single case of malaria has been observed. After ten years of work by the antimalarial brigade, the splenic index has been reduced to zero in the majority of the parishes, and at the still afflicted regions the index hardly exceeds 2%. Prior to 1950, more than 60,000 persons were malarial, while in 1957 not more than 704 cases could be verified in the whole territory, some of them recent emigrants from East Africa or from the Indian Union.

The activities of the *antifilarial brigade* are mostly limited to the two known foci of filariasis, i.e., to the city of Goa and to the frontier hamlet of Reis Magos. A few hundred carriers of the *Wuchereria bancrofti* worm were found in these places, which however represents but a sample, and the actual filarial endemicity is put at 5%. The brigade has to take care of the sick at outpatient wards or dispensaries, and it has to fight against the mosquito and has to sterilize the carriers of latent infection. The *antituberculosis brigade* or BCG brigade is of recent origin. It is composed of a specialist physician, a male nurse and a car driver. The brigade also has a fluorophotographic apparatus. The BCG is prepared by the Camara Pestana Institute at Lisbon. The preschool and school children who want to be vaccinated with BCG are registered by the health offices.

There are also *temporary health brigades* organized according to the needs, and they move wherever an epidemic may break out. They take care of the isolation and treatment of the sick, of the establishment of sanitary blockades, and of the general vaccinations. In the last decade they were successful in stopping the spread of such outbreaks as cholera in 1953, influenza in 1957, and smallpox in 1958. Additional clinical and sanitary assistance comes from the Analytical Laboratory, the Radiology Institute, the Vaccine Producing Works, and the Pharmaco-Technical Laboratory.

We are surprised to learn that Portuguese India is *well provided with hospitals* and

tuberculosis sanatoriums; it has a leprosarium with 200 beds at Macasana. Fifteen years ago the responsibility for the fight against tuberculosis was with the special institution called "Aid to the Tuberculous of India." Since 1957, by an order of the Governor General of the Province, this institution became part of the public health service. The leprosarium at Macasana was established by Dr. Frolano de Melo, and it has its own agricultural colony. The hospital is managed by a physician and four male nurses who live in the leprosarium.

Portugal India has its riches from the mineral products which are brought up from the ground in the several mines. A miner is an important person in this Province, and the government takes special care of his health. The *Medical Care for Miners* became a responsibility of the public health service in 1957. The territory was divided into three mining districts, and each district was equipped with a special, modern hospital. The entire province is only 419 square kilometers, with about 650,000 inhabitants whose health is in the hands of 418 physicians.

Health statistics are very incomplete *in India.* Hence, the frequency of certain diseases is only a guess work. There is a belt of high endemic incidence of leprosy in the east coast and south of the peninsula covering West Bengal, South Bihar, Orissa, Madras, Travancore and Cochin. The incidence may range from 2% to 5% of the population, and in certain areas it may go up to 10%. A belt of moderate *leprosy incidence* is found in the Himalayan foothills running across the north of India. In the northwestern portions very little leprosy is observed.

Hookworm disease causes heavy infection in Assam, the Dooars and Darjeeling, Travancore and South Kanara, and at the tea gardens of South India, and the tea and coffee plantations of Coorg. It is believed that 60% to 80% of the people of these areas are infested with this condition, but the average number of worms per individual is not large.

What about the *iron-deficiency anemias?* The World Health Organization commissioned a Study Group of international experts whose report proves that the condition is world-wide, according to the *hemoglobin surveys* which were carried out in various regions. The most vulnerable to it are the groups of expectant mothers, infants, and young children. Its appearance is quickened by malnutrition and chronic blood losses, while the disease itself impairs health and working capacity, and leads to economic loss. Iron deficiency anemia is the most common type in India, Africa, Central and South America. *In Mauritius,* it constitutes a major health problem since 50% or more of certain groups of the population may be affected. The anemia improves greatly with iron medication. Here iron is best given orally, and not by injection. It is also unwise and uneconomical to give, as a routine, folic acid and vitamin B_{12} to pregnant women, since the great majority of anemias of pregnancy are of the iron-deficiency type in which these substances are not required.

From several parts of the world, an *increased incidence of gonorrhea* has been reported. Apparently the gonococcus has devolped a penicillin-resistance. If so, then it seems to be a repetition of the sulfonamide story. As well known, before the Second World War, gonorrhea had been treated with sulfa drugs; yet, the *drugs became gradually so ineffective* that, already in 1943, 75% of the gonorrhea cases treated with sulfonamides failed to produce a cure in Italy. In other words, the strains of gonococcus which were susceptible to sulfa drugs were gradually weeded out through the years. The same sequence of events seems to be repeated with penicillin. At the start of the use of this antibiotic, the success of the gonorrhea treatment with penicillin had been almost 100%. Nowadays, relapses (or reinfections?) are more frequently seen, although gonorrhea appears to be a much milder disease than formerly. Nevertheless, the physician may be forced to use larger doses, or different preparations of penicillin, alone or in combination. These therapeutic problems have been recently discussed at the

September meeting of the WHO *Expert Committee on Venereal Infections* in Geneva.

In England and in Wales, two-thirds of all general and mental *hospital beds occupied by* those over 65 years of age are taken up by *the single, the widowed, and the divorced.* The single (or, in other words the person who never married), who constitute 12.6% of the population over 65 years and over, according to the report of the WHO Expert Committee on Mental Health, contributed 55.4% of the admissions to mental hospitals. It just shows how great is *the loneliness of the aged,* and that one of the best prophylactic endeavours to preserve the mental health of the aged is the provision of more human contact for those who are without relatives or friends. (NOTE: The condition in England is just an example of the *world-wide* isolated status of the aged. It happens also in Asia where, with the development of urbanization, the traditional extended family tends to be dissolved. Industrialization, urbanization, the creation of new towns are accompanied by the *isolation of the aged,* and are a contributory factor in the causation of mental disorders. Isolation certainly increases the desire of the lonely to enter into a hospital with his ailment. Whether the simple contact with other people would be an adequate measure against loneliness is questionable.)

The *Finnish Cancer Registry* was established through the initiative of the Cancer Society of Finland in 1952. Data on newly diagnosed cancer patients have been collected since early 1953. All hospitals, pathology laboratories, and private practitioners were urged to report to the registry all new patients whom they find cancerous. Since 1954, 8,375 new cases of cancer were detected; of these 3,038 were in men, 4,337 in women. In women, the most frequent sites of cancer were the stomach, uterus, breast, skin, ovary, colon (in this order); in men, the stomach, lung and bronchi, skin, prostate, esophagus, lip, larynx, colon (in this order). *Geographical factors* may be at work also in the pathogenesis of cancer of certain sites. Thus, the survey revealed that cancer of the lungs seems to be more frequent in Finland than in most other countries. The incidence rate of this type of cancer was 39 per 100,000 of population. Tumors of the digestive system were also very common in Finland. *Esophageal and gastric cancer* is more frequent in Finland than in most other countries, but tumors of the lower parts of the gastrointestinal tract are fairly unusual there. The cause of the peculiarity cannot be found in the composition of the Finnish food.

In the group of human diseases included under the general term of *virus hepatitis,* several different types have been recognized during the last decade. At present, the following types are distinguished: (1) the inframicrobe epidemic hepatitis, or Botkin's disease (catarrhal jaundice); (2) the *scleroge*nous *hepatitis* which was first identified at the time of an epidemic in Romania in 1948-49; (3) the *non-hemagglutinating virus hepatitis,* which is a new type, making its first appearance in 1955 in Romania; and (4) the homologous serum hepatitis, called also Sergueyev-Tareyev disease after the two men who first isolated its virus in 1940. The so-called "syringe" hepatitis may be the result of any of the above mentioned four viruses. Authorities of the *Romanian Institute of Inframicrobiology* believe that the second and third varieties of the hepatitis virus are the result of transformation of the Botkin virus as a result of a natural mass immunization of the Romanian people with the parent virus of catarrhal jaundice.

For several days of last April, the Unesco Palace of Paris was the site of a meeting which discussed various *problems of the Sahara,* including the human diseases and the life of Europeans in the desert, the psychological effect of the sand, and the medical service which can be offered to these people. The great *disease of the oasis* is still trachoma. Tuberculosis keeps the second rank, with the greatest incidence in the sedentary people of the larger centers. Antituberculosis campaigns are difficult, and the only effective prevention today is the mass vaccination with BCG. In the years 1950-56, over

400,000 young people had been examined in South Algeria, and 120,000 were vaccinated by the health mission of the World Health Organization. Malaria, formerly a great scourge, became less dangerous after the new post-war system of control. Syphilis and venereal diseases have a 2% incidence. Smallpox is almost disappearing with the preventive vaccination, and such infections as rickettsiasis and recurrent fever are also infrequent. Very frequent are the childhood diseases of measles, varicella, parotitis, whooping cough, also typhoid fever, while scarlet fever, diphtheria, meningitis, dysentery, poliomyelitis are rare. Parasites are numerous (fungi, worms), but scabies is exceptional. Rickets and avitaminosis are often seen, but scurvy is seldom seen. Vitamin deficiencies cause much absenteeism.

In Callao, which is the first port of the State of *Peru, rabies* was found at a high rate among the dog population in the early years of the 1950's, with an increase frequency of dog bites some of which also resulted in human victims of the disease. It was decided to *kill the vagrant dogs* with strychnine, and to inoculate the others against the rabies virus. Half of the dogs were killed (about 7,218), but the inhabitants did not like such a wholesale massacre of the canine population. Thus, the program was suspended, but it had to be again resumed in 1955 when the dogs were being eliminated in a sort of CO-gas chamber. The present control of rabies is according to a decree of the Ministry of Health which prescribed the obligatory vaccination of all dogs. A heavy penalty upon the owners of roving dogs is imposed in the hope that the chances for dog bites will be reduced.

Juvenile delinquency seems to be a plague all over the world. Along with other problems the juvenile delinquents have been causing headaches for the guardians of law and order in Calcutta. The Juvenile Aid Bureau of the *Calcutta* Detective Police handled some 1,348 criminal cases committed by boys under 16 years of age in 1958. In Calcutta the crimes are getting more and more serious year after year.

To the various districts of the *Soviet Union, medical detachments* are sent out any time that there is an unusual outbreak of some infectious disease. These detachments render practical and systematic aid to the local organs of the public health service. Such teams were sent to the provinces of Kemerovsk, Per, Sverdlovsk, Kalinin and Irkutsk as well as to Habarovsk and the Udmurt Republic for the fight against tick encephalitis. A combined detachment of the Sechenov Medical Institute at Moskva, and of the Virological Institute of the Medical Academy of the USSR was dispatched to the *Jaroslav* Province for the study of *epidemic hemorrhagic fever* (of the Far-Eastern type). This fever now has been observed practically all over the world. Recent reports mentioned its occurrence *in Argentina.* In the Province of Buenos Aires, a case of this virosis occurred in an 18-year old youth; he suffered from the neural variety of the disease. *In Inner Mongolia,* too, in the T'uliho Area, an epidemic disease broke out in 1955 which was proved to be identical with the epidemic hemorrhagic fever previously described in the Far East. About 198 cases were observed from September to the end of November of which 104 were true cases of the virosis. Most of the affected people were carters and masons. The clinical manifestations were typical. Among the true cases only nine proved to be fatal.

The influence of *ionizing radiations upon immunity* is of great interest to microbiologists and to the military authorities who are constantly looking out for the prevention of an eventual *bacteriological warfare.* A recent Russian study pointed out that radiation causes injury to different normal functions of the body, including a reduction of the natural resistance of the organism to infection. After irradiation, animals become sensitive to an injury by bacteria (e.g., white mice become sensitive to dysentery and to typhoid bacteria). Similarly, radioisotopes may also reduce the resistance (such as radioactive I or P). The barrier function of the tissues is also reduced. Actually, there is a *radiation bacteremia* which is seen 2-3 days

after irradiation of the animals. It seems that the source of this is the intestinal tract. Yet, streptococci and staphylococci in the blood may also originate from the respiratory organs, but the mechanism of this is still unknown. In animal experimentation, such bacteremia arose after 300 r. Interesting is the observation of a Russian scholar that not all bacteria are able to get through the intestinal wall under the described conditions (e.g., the B. perfringens cannot get through). Irradiation will result in autoinfection, due to the oppression of specific immunity and of general resistance of the organism. Oppression of specific immunity may play a role in reference to such latent infections as chronic tuberculosis, dysentery, and brucellosis. Experiments of others (Tumanyan, Shevcoc) showed that even smaller doses of irradiation (about 150 r) may cause the change of a latent *dysentery in a bacillus carrier* into a clinically manifest form of dysentery. Such a problem of the combined effect of radiation and bacteria still requires much additional study and research.

The September visit of the Premier of Communist Russia must have convinced everyone that, regardless of the *Khrushchevian assurance of goodwill* and peaceful coexistence, the ultimate aim of his ideology is the extermination of our system of life. In this aim, he had not yielded an iota's dot. This is exactly the same situation as it had been yesterday and yesteryear. Here is a very definite proof for it. In the 1958 February issue of the Russian Military Medical Journal (Voenno-medicinsky zhurnal), the leading article—which was, as this type of article had always been, written under the inspiration of the Communist Central Committee—was bragging about the achievements of the U.S.S.R. which that country had made in the field of industry under 40 years of Communistic regime. The country was now the leader of industrial Europe, said the article, and the second in the world as to production. But, continued the writer, the U.S.S.R. will be able to catch up with the United States of America in both industrial and food production, and, in the *rivalry of "socialism" and capitalism,* socialism will win. The further bragging asserted that the camp of the "socialists" was now an indestructible force which might stop any "aggressor." "The Soviet Army was, is, and will be always stronger than any Army of the capitalistic government." The "aggressive circles of the imperialistic governments" are planning vile plans of war against the U.S.S.R., continued the article, and against the entire socialistic bloc. The aggressor bloc, in which the journal mentions the United States as a leading member, are responsible for the development of the ABC weapons of mass destruction. Period. How, then, could anyone of us think that the chief representative of Communism, which has such a blind hatred and such a malicious misunderstanding toward our decent aims and way of life, would change his personal attitudes for the better after a few friendly(?) handshakes and a sightseeing tour at which he could not help becoming envious at the prosperity of his rivals? Thus, there will be *continued competition,* which is in fact the essence of the "cold war," since—as all serious students of the present Russian public life conclude—rivalry is nowadays the *most powerful driving force* in all branches of Soviet culture and science.

Some of *our medical terms* are open to much criticism. Some may be downright misleading especially if someone hears them pronounced. A letter-writer from Assam, for instance, wonders how on earth two such *stupid prefixes as "hyper"* and *"hypo"* could survive? They have an almost identical spelling and pronunciation, and a completely opposite meaning. Moreover, since they are Greek in origin, their use with Latin nouns is horrible to the classicist. Why not substitute *"super"* and *"sub"* for these prefixes, at least in words of Latin derivation? As the letter writes: "When used in connexion with blood pressure, they would not form a hybrid word as is now the case. And think how much better the patient would feel, too, if he heard that he had *"supertension"*! . . . *Multa paucis!*

The Sir Henry Wellcome Medal and Prize

COMPETITION FOR 1960

THE competition is open to all medical department officers, former such officers, of the Army, Navy, Air Force, Public Health Service, Veterans Administration, The National Guard and the Reserves of the United States, commissioned officers of foreign military services, and all members of the Association, except that no person shall be eligible for a second award of this medal and prize and no paper previously published will be accepted.

The award for 1960, a medal, a scroll, and a cash prize of $500, will be given for the paper selected by a committee composed of the Association's vice-presidents which reports on the most useful original investigation in the field of military medicine. The widest latitude is given this competition, so that it may be open to all components of the membership of the Association. Appropriate subjects may be found in the theory and practice of medicine, dentistry, veterinary medicine, nursing and sanitation. The material presented may be the result of laboratory work or of field experience. Certain weight will be given to the amount and quality of the original work involved, but relative value to military medicine as a whole will be the determining factor.

Each competitor must furnish six copies of his paper which must not be signed with the true name of the author, but are to be identified by a *nom de plume* or distinctive device. These must be forwarded to the Secretary of the Association of Military Surgeons of the United States, Suite 718, 1726 Eye St. N.W., Washington 6, D.C., so as to arrive at a date not later than 20 June 1960, and must be accompanied by a sealed envelope marked on the outside with the fictitious name or device assumed by the writer and enclosing his true name, title and address. The length of the essays is fixed between a maximum of 10,000 words and a minimum of 3000 words. After the winning paper has been selected the envelope accompanying the winning essay or report will be opened by the Secretary of the Association and the name of the successful contestant announced by him. The winning essay or report becomes the property of the Association, and will be published in MILITARY MEDICINE. Should the Board of Award see fit to designate any paper for "first honorable mention" the Executive Council may award the writer life membership in The Association of Military Surgeons, and his essay will then also become the property of the Association.

NOTES

Timely items of general interest are accepted for these columns. Deadline is 1st of month preceding month of issue.

Department of Defense

Ass't Secretary (Health & Medical)—Hon. Frank B. Berry, M.D.

Deputy Ass't Sec'y—Hon. Edw. H. Cushing, M.D.

INTRODUCTION

The Selective Service System has been called upon to furnish 6,000 men for the month of February; these are for the Army.

MEDICARE PROGRAM

There has been a restoration of certain parts of the Medicare Program as of January 1. To list all the details is not possible in the space here. These details can be learned from the surgeon at any military station. For instance, there are limitations placed on the treatment of certain emergencies. Consequently there must be a clear understanding by the parties involved. In case care is given by civilian physicians in civilian hospitals the nearest military post should be contacted to ascertain the limits of such care, and this contact should be made promptly. This surely is a reasonable request in the efforts made by our government to provide care to dependents. Incidentally about $62.2 million is expected to be spent for the Medicare program this fiscal year.

Army

Surgeon General—Lt. Gen. Leonard D. Heaton

Deputy Surg. Gen.—Maj. Gen. Thomas J. Hartford

ASSIGNMENTS SGO

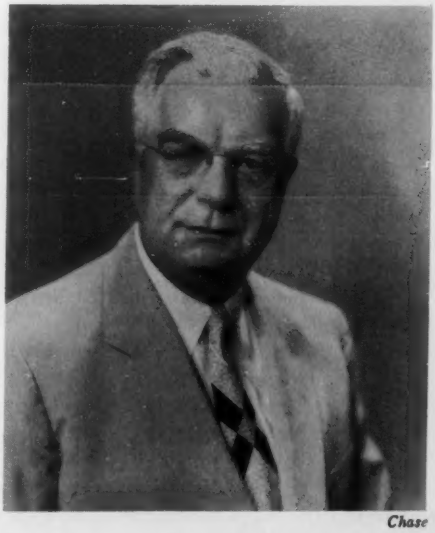
Colonel Laurence A. Potter, MC, has been assigned as Deputy Chief, Personnel and Training Division, Office of the Surgeon General.

Lt. Colonel Richard R. Taylor, MC, has been named Chief of the Research Division of the U. S. Army Medical Research and Development Command, Surgeon General's Office. He has been Chief of the Biophysics and Astronautics Research Branch since September of last year.

Major Thomas B. Dunne, MC, has been assigned Chief, Preventive Medicine Research Branch, in the Research and Development Command of the Army Medical Service.

THE FAIRBANK MEDAL

The first Fairbank Medal, an award established by Brigadier General Leigh C. Fairbank, U. S. Army, Retired, was presented by him at exercises at the Army Medical



Chase

Brig. Gen. Leigh C. Fairbank, USA, Ret.

U. S. Army Photo

(OBVERSE)

U. S. Army Photo

(REVERSE)

Service School, Fort Sam Houston, Texas, December 18, 1959.

The medal is to be presented to the dental officer with the highest scholastic standing in the Advanced Officers Course of that school. The recipient of the first medal was Major Kenneth W. Thomasson, whose new station is the 2nd Logistical Command, Fort Bragg, N.C.

General Fairbank who entered military service in 1914, was Chief of the Army Dental Corps from 1938 to February 1942 at which time he retired from active military service. He was the first chief of that corps to attain General grade. After his retirement he entered private practice in the specialty of orthodontia in Washington, D.C., in which he had gained distinction in the military service. In 1921 he was one of the three Army dentists selected by the Surgeon General to attend the Dewey School of Orthodontia in New York City, and in 1938 he was the only Army dental officer to hold a certificate from the American Board of Orthodontia. He is a member of the American Association of Orthodontists; a Fellow of the New York Academy of Dentistry, in the Society for Research and Child Development, and in the International College of Dentists.

FORMOSA'S ONLY LADY GENERAL VISITS CHIEF OF ARMY NURSE CORPS

The only woman in Nationalist China ever to receive a major general's star (there is no brigadier general rank), Maj. Gen. Mai-yu Chow, visited Colonel Margaret Harper, ANC, Chief of the Army Nurse Corps on December 14-15, 1959, to discuss nursing practices and to learn more about U. S. military nursing methods.

U. S. Army Photo

GENERAL MAI-YU CHOW, Dean of Nursing at the National Defense Medical Center, Taipei, Taiwan, and COLONEL MARGARET HARPER, Chief of the Army Nurse Corps, look over samples of clinical records used in U. S. Army hospitals.

After visiting Colonel Harper in the Army Surgeon General's Office, Washington, D.C., General Chow toured the Walter Reed Army Medical Center where she was shown some of the wards at Walter Reed Army Hospital.

General Chow is Dean of Nursing at the National Defense Medical Center in Taipei, Taiwan. Currently on a six-month travel fellowship under auspices of the China Medical Board of New York, General Chow is regarded as a leader in the Taiwan nursing world and as one of the most distinguished members of her profession in the Far East.

WOMEN'S GREEN UNIFORM

The women's Army Green uniform, including a separate coat, skirt and garrison cap, is now scheduled for first issue and sale on July 1, with the present wool taupe uniform to be declared obsolete about October 1, 1964.

Navy

Surgeon General—REAR ADM. BARTHOLOMEW W. HOGAN
Deputy Surgeon General—REAR ADM. EDWARD C. KENNEY

ASSIGNMENTS BUMED

Captain Malcolm W. Arnold, MC, has been re-assigned in the Bureau of Medicine and Surgery as Director of Professional Services to succeed Captain Eugene V. Jobe who has retired. Prior to this assignment Captain Arnold was Head of the Bureau's Training Branch.

Captain John W. Albrittain, MC, has been designated as Head of the Training Branch, Bureau of Medicine and Surgery.

LIFE SCIENCES DEPARTMENT ESTABLISHED

At Point Mugu, California, there was recently established a Life Sciences Department as part of the new Missile and Astronautics Directorate. Captain C. E. Pruett, Medical Corps Officer of the Naval Aviation Station, was assigned collateral duties as the Department Head.

The new department will have three divisions: the Bio-Medical Division under Lieutenant Commander G. F. Kelley, MC; the Environmental Division, with Commander S. Goren as Acting Head; and the Research and Engineering Division, with Commander J. F. Snyder, MSC, as Acting Division Head.

BIOMEDICAL RESEARCH FACILITY

A biomedical research facility has been planned for the National Naval Medical Center, Bethesda, Maryland. The facility is designed by medical researchers exclusively for radiation research.

As explained by the Surgeon General the need for such a facility evolved because of the non-laboratory conditions that prevail during nuclear weapons field testing and the time involved in programming such tests, an infinitely greater amount of controlled biomedical information can be obtained in the laboratory than from field tests, and renders them independent of weather and other uncertainties of field testing.

In addition to producing data on the response of biological systems to nuclear radiation of atomic detonations the facility would study such problems as:

a. Shielding requirements in utilization of nuclear power,

b. Methods of preventing radiation sickness which may follow treatment for cancer,

c. Advanced training at a single facility in the highly complex fields of health physics, and radiobiology, and

d. Investigation of methods of application of nuclear energy for medical therapeutics.

Short-lived isotopes could also be provided for local use in medicine and biology.

HONORED

Dr. Charles W. Shilling, a former officer of the U. S. Navy Medical Corps, and now Deputy Director, Division of Biology and Medicine, U. S. Atomic Energy Commission, was recently presented the Outstanding Achievement Award by the Regents of the University of Michigan.

This award is presented to alumni for outstanding accomplishments.

Dr. Shilling has had a distinguished career following his graduation from the University of Michigan in 1927. While in the Navy Medical Corps in which he was commissioned following graduation, he became interested in the medical problems of submariners. He himself served on submarines where he could come in close contact with the problems. From this experience a medical research program was developed.

One of Dr. Shillings' important assignments was in the Office of Naval Research. In 1955, he retired from active naval service after a two year tour as Senior Medical Officer of the U. S. Naval Academy at Annapolis and Head of its Department of Hygiene. Since that time he has been with the U. S. Atomic Energy Commission.

RECEIVES ARMY CITATION

Commander Leo A. Jachowski, MSC, USN, a staff member of the Naval Medical Research Institute, Bethesda, Maryland, was presented an Army Citation and Commendation Ribbon with Metal Pendant by his Commanding Officer, Captain O. E. Van der Aue, MC, USN.

The commendation was awarded by the Secretary of the Army for meritorious service rendered while Commander Jachowski was on duty at the U. S. Army Tropical Research Medical Laboratory in Puerto Rico. He is a parasitologist with a Doctor of Science degree from Johns Hopkins University.

RETIRED

Captain Eugene V. Jobe, Medical Corps, who has been Director of the Bureau of Medicine and Surgery's Professional Division was retired recently after completing more than 29 years of active naval service. He has taken a position with the American Medical Association, Washington office, as Medical Liaison Representative, and will continue to make his residence in Washington, D.C.

Other Medical Corps officers recently retired are: Captains Harry G. Beck, Jarold E. List, and Walter H. Schwartz.

UNIFORM FOR HOSPITAL CORPS

Hospital Corpsmen and enlisted women of the Hospital Corps involved in the direct care of patients will soon be wearing a new uniform. White cotton coats will be used by the hospital corpsmen and white dental operating smocks for the enlisted women. Both will have the name-plate identification badge. This new attire is the result of a questionnaire to Medical Department personnel.

Air Force

Surgeon General—MAJ. GEN. OLIVER K. NIESS

Deputy Surg. Gen.—BRIG. GEN. JOHN K. CULLEN

NAMED CHIEF NURSE

Colonel Dorothy N. Zeller has been

Air Force Photo

COL. DOROTHY N. ZELLER, USAF, NC

named Chief of the U. S. Air Force Nurse Corps by Major General O. K. Niess, Surgeon General. The appointment was effective January 8. She succeeds Colonel Frances I. Lay, who has been named Command Nurse for the U. S. Air Forces in Europe, Wiesbaden, Germany.

A native of Maryland, Colonel Zeller entered the military service in 1935. She is a graduate of the Philadelphia General Hospital School of Nursing, the Hospital Administration Course, Medical Field Service School, Fort Sam Houston, Texas, the Flight Nurse Course at Gunter Air Force Base, Alabama, and holds a bachelor's degree in Nursing Education from the University of Maryland. She has the distinction of being the Deputy Chief of the Air Force Nurse Corps on two occasions, the last appointment having been made in January 1959 and while in that assignment was promoted to be Chief of the Corps.

HOW TO EAT

Astronauts, that is the seven hand-picked ones, were given a course of instruction at Edwards Air Force Base, California on how to eat under conditions of weightlessness. Since this phenomena is obtained for only about one minute while an airplane is flying a "parabolic curve" these men were freed from the responsibility of operating the airplane. Their entire attention was devoted for these short periods of time to eating.

The foods and liquids were contained in plastic "squeeze type" bottles and tubes, much like toothpaste tubes. One of the astronauts consumed grape juice, noodle soup and water on his first zero gravity flight.

THE PLANET PLUTO

Thirty years ago, March 13, 1930, while an assistant at the Lowell Observatory, Flagstaff, New Mexico, Clyde W. Tombaugh, now professor of Astronomy at the New Mexico State University Research Center, discovered the planet Pluto. Only a few months before he had come from a farm in Illinois; he had no college education. But his interest in astronomy had existed for many years, and it was this interest that got him a job at Flagstaff.

Now with a bachelor and master degrees he is continuing his study of the heavens. With many other scientists on the program at the U. S. Aerospace Medical Center at Brooks Air Force Base, Texas, Professor Tombaugh recently gave a talk on "Celestial Bodies: The Moon, Mars, and Venus."

This five-day space medicine course was opened with a welcoming address by Major General Otis O. Benson, Jr., Commander of the Aerospace Medical Center. The new course is designed to offer the latest information on medical developments in support of space operations.

Public Health Service

Surgeon General—LEROY E. BURNEY, M.D.
Deputy Surg. Gen.—JOHN D. PORTERFIELD, M.D.

POLIOMYELITIS

An increase in the number of paralytic poliomyelitis cases was recorded for the 52-week period, ending January 2, 1960, as compared to the preceding 52-week period. In the 1958 period there were 3122 cases; in the 1959 period there were 5694 cases.

The need for a vigorous campaign directed to vaccination for poliomyelitis is apparent. This campaign must be intensified particularly among the lower socio-economic groups. When? The campaign should be started at once and continued for at least the next six months.

In reflecting on the reasons why this group does not accept vaccination readily we feel there is a lack of education which might be overcome by mobile movie theaters for street audiences. These trucks could have a small dispensary for administering the vaccine.

Another necessary measure is the elimination of pain from the needle. This might be overcome by the use of the new type injector now on the market.

However the campaign is conducted, it should be a vigorous one.

LIVE POLIOVIRUS VACCINE

In view of the current interest and increasing comments on the live poliovirus vaccine, the summary of Dr. Leroy E. Burney's article which appeared in the December 18 issue of the *Journal of the American Medical Association* is reproduced here:

"The Public Health Service has a considerable interest in the development of live poliovirus vaccine. This interest arises both from its concern with preventive measures and from its legal responsibilities for the licensing of biological products. A continuing review of progress has been made by the PHS committee on live poliovirus vaccine. This review indicates important progress toward the development of a safe and effective poliomyelitis vaccine for oral use. Some important safeguards will need to be developed before there can be full assurance concerning the safety and potency of these products for general use by the physician.

"When the scientists and public health physicians of the United States and other countries have provided evidence of safety and of lack of significant reversion to virulence of the vaccine strains, on the basis of both laboratory and field experience, and when proper manufacturing safeguards have been satisfactorily established by the vaccine manufacturers the Public Health Service will act on applications for the licensing of live poliovirus vaccine. In the meantime, there should be no abatement of full use of the demonstratedly effective Salk Vaccine."

HEPATITIS

There has been a marked increase of hepatitis in 1959. For the 52-week period, ending January 2, 1960, there were 23,187 cases as compared to 15,498 cases for the same period of 1958.

DIPHTHERIA

An upward trend in cases of diphtheria should emphasize the need for some attention to the vaccination program. In 1959 there were over 900 cases of diphtheria in the United States.

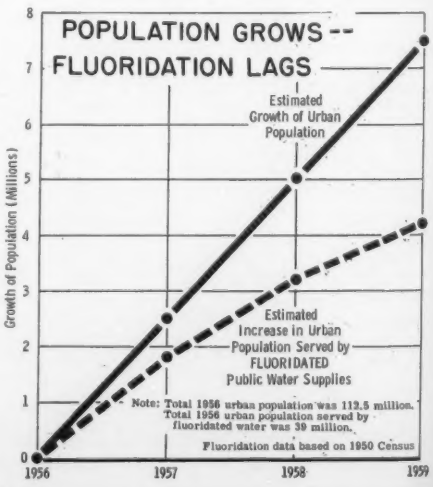
The test for immunity is relatively simple. It should be used more frequently and particularly when a child begins on his school career. It is presumed that most children have been immunized against this disease before their first birthday. However, this should not end the program. The prevention of a disease that can leave so much disability in the heart and nervous system is one of the real accomplishments of the 20th Century. Since there is so much to offer in prevention the public health program of a community should keep this matter before its people.

STRONTIUM-90

The Public Health Service which maintains twelve sampling stations across the country for the determination of the levels of radioactivity in milk has reported that the amount of strontium-90 decreased during August and September. The New York sampling station showed the greatest drop which was from 12.3 micromicrocuries per liter in August to 4.2 micromicrocuries per liter in September.

FLUORIDATION

A recent study by the Public Health Serv-



ice has shown that communities have become lax in extending to their people the recommended fluoridation of water program.

It is difficult to understand why, in the presence of a great problem of dental caries in the nation and the expected decrease in the ratio of dentists to population, that the American people do not accept more widely the fluoridation program.

This program has these facts in its favor:

1. More than 25 years of research has shown that water containing a proper amount of fluoride reduces dental decay by more than 60 percent,
2. Controlled fluoridation has been proved entirely safe,
3. Fluoridation costs only a few cents per person per year,
4. Virtually all scientific and professional health organizations with competence in this field, including the American Dental Association and the American Medical Association, have urged the fluoridation of public water supplies.

TRAINEESHIP PROGRAM

The Public Health Traineeship Program has been established for the purpose of increasing the number of trained professional public health personnel. It is open to U. S. citizens who have a basic professional education and are interested in the field of public health.

A monthly stipend and tuition fees for the individual, with additional allowances for dependents, permit the individual to go to a school of his choice providing he is accepted by the school and the institution has a recognized standing.

Further information on this training can be obtained from the Division of General Health Services, Public Health Service, Department of Health, Education, and Welfare, Washington 25, D.C.

TRAINING IN EPIDEMIOLOGY

The Communicable Disease Center, Public Health Service, Atlanta, Georgia, will offer a course in Applied Epidemiology, May 9-13.

This course which serves both as a refresher course and an introductory course for new physicians in the public health field, is for physicians who serve as investigators of disease outbreaks or have administrative responsibility for such investigations.

Further information and application forms may be obtained from the Center, 50 Seventh Street, N.E., Atlanta 23, Attention: Chief, Training Branch.

APPOINTMENT

Surgeon Burton M. Cohen, USPHS-R. (Inactive) has been appointed Acting Associate Director (Director, Respiratory Section), at the Thomas J. White Cardiopulmonary Institute, Pollack Chest Hospital, Jersey City, New Jersey. He has also received an appointment as Assistant Professor of Clinical Medicine, Seton Hall College of Medicine and Dentistry.

RETIRED

Dr. C. J. Van Slyke, who was Deputy Director of the National Institutes of Health, Bethesda, Maryland, recently retired after more than thirty years service with the Public Health Service.

He was appointed Director of the National Heart Institute upon its establishment in August 1948 and served in this position until December 1952, at which time he was appointed Associate Director of the National Institutes of Health. In 1958, he was made Deputy Director of the Institutes.

BOOKLETS AVAILABLE

A Digest of State Air Pollution Laws (PHS Publ. No. 711) is available for 75¢ a copy.

Little Strokes—Hope Through Research (PHS Publ. No. 689) is a new brochure prepared by the National Institute of Neurological Diseases and Blindness which explains for the non-professional person the meaning of strokes and their treatment. Single free copies may be obtained from the

above named Institute at Bethesda, Maryland. Quantity price is 100 for $7.50.

The above booklets may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D.C.

Veterans Administration

Chief Medical Director—WILLIAM S. MIDDLETON, M.D.

Deputy Chief Med. Dir.—R. A. WOLFORD, M.D.

VETERAN STATISTICS

The estimated number of veterans at the end of November, 1959, was 22,610,000 as compared with 22,720,000 on November 30, 1958. The number of World War I veterans on November 30, 1959, was 2,733,000.

The average patient load in Veteran Administration hospitals during November 1959 was approximately 111,880, with an additional 3,999 in non-VA hospitals.

DIRECTOR-DIETETIC SERVICE

Mrs. Helen R. Cahill recently succeeded Miss Grace Bulman, who has retired, as Director of the Dietetic Service in the Veterans Administration Department of Medicine and Surgery.

A native of Iowa and a graduate of the Iowa State College at Ames, Mrs. Cahill joined the Veterans Administration in 1940. For the past ten years she has been assistant director of the Dietetic Service. In 1953 she received her masters degree in personnel administration from George Washington University. She is currently president of the District of Columbia Dietetic Association.

TO BECOME DIRECTOR ACS

Dr. John Paul North, Dallas, Texas, will become Director of the American College of Surgeons, effective January 31, 1961. The announcement was recently made by Dr. I. S. Ravdin, Chairman, Board of Regents.

Dr. North, who will succeed Dr. Paul R. Hawley who has been Director since March 1950, has been chief, Surgical Service, Veterans Hospital, Dallas, since 1955, and professor of clinical surgery at Southwestern Medical School of the University of Texas since 1946. During World War II he was chief, Surgical Service, 20th General Hospital, C.B.I. Theater. He is currently a colonel, Medical Corps, U. S. Army Reserve, and a consultant to the Armed Forces.

MALE NURSES IN VA

Of the 170 hospitals of the Veterans Administration, 124 have men on their staffs as professional nurses. About half of the 500 male nurses work in the mental hospitals of the Administration. About 125 are in key positions of nursing education, and two of these are in the Washington central administrative staff.

Miscellaneous

NEW YORK CHAPTER

The New York Chapter of the Association of Military Surgeons held its fall meeting on December 10, 1959 at Mitchell Air Force Base, New York. There was an excellent attendance which included the wives of members and their guests at the cocktail party and dinner which preceded the business meeting.

Colonel George M. Knauff, USAF, MC, Surgeon at Patrick Air Force Base, Florida, and recipient of the 1959 Sustaining Membership Award of the Association of Military Surgeons of the United States, gave a very interesting talk on "Medical Aspects and Future of the Missile Program."

The following were elected to serve as officers for 1960: *President,* Colonel Wilbur Smith, USAFR, MC; First Vice-President, Captain Samuel Candel, MC, USNR; Second Vice-President, Major Edward A. Barrett, MC, USAR; Secretary, Colonel James A. Rooney, MSC, USAR; Treasurer, Lt. Colonel Joseph Hirsch, MSC, USAR.

ASSISTANT FOR AGING

Secretary of Health, Education, and Welfare, Arthur S. Flemming, has named Dr.

James Watt to be Special Assistant for Aging.

Dr. Watt is at the present time Director of National Heart Institute and will continue in that position and at the same time fill the position aforementioned. This additional duty position again emphasized the importance of the problems of the Aged in the nation. The problems will be discussed in the White House Conference on Aging in January 1961.

MEDICAL EDUCATION

In his "Progress Report 1958-1959," Dr. George F. Lull, President of the American Medical Education Foundation, stated that "69% of America's practicing physicians contributed to medical education this year through either A.M.E.F. or by individual gifts to their schools. No other profession has exhibited its loyalty in so tangible a way." In actual dollars the amount was $4,167,663.22, but there is something else to be added and that is the free hours given to instruction in medical schools by physicians.

GIFT TO MEDICAL EDUCATION

The University of Pittsburgh School of Medicine will be strengthened in its preventive medicine teaching program by a gift of $400,000 from the A. W. Mellon Educational and Charitable Trust.

Dr. Kenneth Rogers, professor and chairman of the Department of Preventive Medicine believes that preventive medicine is inseparable from the practice of medicine and that the students should be kept aware of this fact constantly while they are receiving their clinical instruction. Besides holding a master of public health degree he has had special training in pediatrics, a background which will enable him to implement his ideas.

SOCIAL SECURITY

January marked an increase in the "take" for Social Security. Employees and employers will each contribute 3 percent on the first $4800 of annual earnings. Self-employed people will pay a tax of 4½ percent on the first $4800 of net earnings for 1960, but this tax will not be due until early in 1961.

The Social Security Act has been in existence 24 years. The first payments were made for the month of January 1940. Since that time, 21 million beneficiaries have received benefits totalling $50.4 billion. At the end of 1959, the 13¾ million people receiving benefits under the old-age, survivors, and disability insurance provisions were being paid $850 million a month. This is an increase in 1959 of 1½ million beneficiaries and $153 million a month.

DISHONEST PRACTICES

Several months ago we warned our readers about depositing money in building and loan associations that were not insured by a Federal agency. The recently uncovered racket by a chain of such offices that claimed insurance but did not specify "a Federal agency" has justified our warning. The "insurance" was taken out in a company doing a backroom office business in a foreign country. So beware!

But there are other dishonest practices. The Food and Drug Administration is constantly uncovering them. One recent one was the marketing of a plastic "breather bag" for the treatment of leg cramps! The user was advised to take a deep breath, exhale into the bag through the mouth, and inhale the contents of the bag through the nose.

It has been difficult to keep up with many of these "crooked" practices, but the Food and Drug Administration with its limited personnel is making a noble effort. The general public whose welfare is at stake can assist that administration in its work by bringing such dishonest practices to light.

FOOD ADDITIVES

March 6 is the deadline for the clearance of additives for food. The Food and Drug Administration has announced that the use of any food additive without a formal authorizing regulation or an extension of time after that date will be cause for claiming the

food to be adulterated and will be illegal for shipment.

There are many chemicals commonly used in foods which are generally recognized as safe; some of these must have limits established for their use.

SIMULATED DISASTER

The response to a message sent to the Illinois Civil Defense recently in a mock problem brought members of the 374th Convalescent Center, a Reserve medical unit, out to participate.

A 200-bed Emergency CD Hospital was set up for treatment of the simulated casualties which were collected, sorted, tagged, and given emergency treatment.

Those present for the drill were: Colonel Earl Herron, Commanding Officer of the 374th Convalescent Center, Colonel Frederick Plotke, Commanding Officer of the hospital, Colonel George E. Leone, Surgeon of the Fifth Army, Colonel I. J. Frisch, Illinois CD Medical Consultant, Colonel John L. Wilkin, Northern Illinois Sector, XI U. S. Army Corps (Reserve), and Chief Gerald Slattery, Chicago CD Coordinator.

TESTS FOR INTOXICATION

Chemical Tests for Intoxication is a handbook published by the American Medical Association, 535 North Dearborn Street, Chicago 10, Ill. (Price $1). This 103-page handbook gives much information on chemical tests used in the determination of the presence of alcohol in the body. More and more states are recognizing the value of such tests. It would certainly aid courts if every state would recognize the value of these tests and require a test to be made in case of bodily injury. In the interests of justice this seems reasonable.

BOOKLET AVAILABLE

The Child With a Missing Arm or Leg (Children's Bureau Folder No. 49-1959) is a 25-page pocket size booklet now available for 10¢ from the Superintendent of Documents, Government Printing Office, Washington 25, D.C.

LANGUAGE INSTITUTES

The importance of foreign languages is emphasized by the establishment of thirty-five modern foreign language institutes for the training of 2,000 elementary and secondary school language teachers for next summer. Training will be provided for the French, German, Italian, Russian, and Spanish languages.

COURSE AVAILABLE

An Electrocardiography Course, under the direction of Dr. J. Butterworth, will be given on a full-time, five-day schedule Monday through Saturday, March 14-19, at the New York University Post-Graduate Medical School, 550 first Ave., New York 16, N.Y.

COURSE ON FRACTURES AND TRAUMA

The Fourth Post-Graduate Course on Fractures and Other Trauma, sponsored by the American College of Surgeons, will be held April 27 through April 30, at the John B. Murphy Memorial Auditorium, 50 East Erie Street, Chicago. Registration fee will be $50. Residents will be admitted free upon presentation of a note of identification from chief of service.

MEETING

The Annual Meeting of the American Society of Psychosomatic Dentistry and Medicine, will be held at the Shoreham Hotel, Washington, D.C., beginning Friday evening March 11, preceding the District of Columbia Dental Society Meeting. For further information contact Dr. Jesse Caden, Chairman Program Committee, 5213 Connecticut Ave., Washington 15, D.C.

GASTROENTEROLOGY CONGRESS

The International Congress of Gastroenterology will be held at Leyden and Noordwijk aan Zee, the Netherlands, April 20-24. Further information may be obtained from

the Secretariat, 16, Lange Voorhout, The Hague, the Netherlands.

MEDICAL ELECTRONICS MEETING

The Third International Conference on Medical Electronics will be held in London, July 21-27. The Conference will include an equipment exhibit at Olympia. Further information may be obtained from Lee B. Lusted, M.D., Department of Radiology, University of Rochester School of Medicine, Rochester 20, N.Y.

STRONTIUM-90

Strontium-90 can be removed from skimmed milk, up to 94%, without altering milk's calcium content. The method used is similar to that used to treat water with softeners to eliminate certain minerals. *Bulletin of the International Defence Organization, Geneva.*

DUTY

If there is a lesson more essential than any other for this country to learn it is the lesson that the enjoyment of rights should be made coincident with the performance of duty. For one failure in the history of our country which is due to the people not asserting their rights, there are hundreds due to their not performing their duties.—THEODORE ROOSEVELT, quoted in *Mgt. Review.*

DEATH FROM GAS

Many died from gas last year: "Some inhaled it; some touched a match to it—but most just stepped on it!"—*Redstone Rocket.*

Honor Roll

Since the publication of our last list, the following sponsored one or more applicants for membership in the Association:

Vice Adm. Joel T. Boone, USN, Ret.
Dr. George G. Trattner
Capt. Robert P. Hatch, MC, USA
Maj. Edward A. Barrett, MC, USAR

New Members

Col. C. Fremont Hall, MC, USAR
S A Dent. Surg. Glen D. Elliott, USPHS
Capt. Jerome Melvin Listernick, MC, USAR
LCdr. Delma Linville, NC, USN
Capt. Thomas P. Connelly, MC, USN
Capt. Edwin M. Leach, MC, USN
Capt. Wayne S. Hansen, MC, USN
Lt. Ellis W. Riser, MSC, USN
Capt. Charles B. Newton, MC, USN
LCdr. James J. Murphy, MC, USN
Lt. Carney Fitzgibbon, Jr., MC, USN
Capt. R. O. Canada, MC, USN
Lt. Daniel Nicholas Williams, MSC, USN
Lt. Louis Umile Pulicicchio, MC, USN
Lt. Thomas J. Summerour, MSC, USN
Lt. (jg) Beverly J. Taney, MSC, USNR
Capt. Donald R. Childs, MC, USN
Sr. Asst. Surg. Bob M. Foster, USPHS-R
Capt. Robert C. Lehman, MC, USN
Lt. Col. Lester J. Dugan, MC, USAR
Sr. Dent. Surg. Joseph J. Martini, USPHS
Lt. Col. Leon Rudorfer, MC, USAR
Lt. Sam A. Powers, MC, USN
Capt. J. M. Coppoletta, MC, USN
Lt. William M. Narva, MC, USN
Lt. Richard J. Dobies, MC, USNR
Samuel Whitehouse, M.D.
Major Lionel H. Schmahmann, MSC, USA
Lt. Theodore Ch. Harami, MC, USAR
Lt. Samuel Perry Ramsey, MC, USNR

Deaths

BRECK, Charles A., Lt. Colonel, Medical Corps, U. S. Army Reserve, died October 1, 1959, at Wallingford, Connecticut. His age was 55.

Doctor Breck received his medical degree from Yale University School of Medicine in 1930. During World War II he served at the Army and Navy Hospital, Hot Springs, Arkansas. In June 1945 he returned to the practice of medicine in Wallingford. He is survived by his wife who resides at 6 Lincoln Drive, Wallingford, Conn.

ELLIS, George R., Major, Dental Corps, AUS, died December 9, 1959, at his home in Arlington, Virginia, at the age of 70.

Doctor Ellis graduated in dentistry from Georgetown University Dental School in 1916. During World War I he was on duty with the Army Dental Corps. From 1918-1925 he was professor of oral surgery at Georgetown University and later he became Assistant Dean of the Dental School. During World War II he was a member of the Dental Examining Board.

He is survived by his wife, 2725 North Pollard Street, Arlington, Virginia, and a son.

HECK, Mary M., Commander, Nurse Corps, U. S. Navy, Retired, died at the U. S. Naval Hospital, Bethesda, Maryland, December 6, 1959. She was 65.

A native of Cumberland, Maryland, Commander Heck entered the Nurse Corps of the Navy in November 1918 following her graduation from Western Maryland Hospital School of Nursing in Cumberland. She served for more than 27 years and was retired in 1946.

She was awarded the Bronze Star Medal for "meritorious service" and "untiring effort" while serving for ten months as Chief Nurse of a contingent of 100 Navy nurses sent to Southern England to staff a large Naval Base Hospital there (February 1944 to September 1944). During that period more than 10,000 wounded were treated at the hospital. The death rate among combat casualties later compiled, was shown to be only thirty-three hundredths of one percent. After that assignment she was assigned as Assistant Superintendent of the Navy Nurse Corps in the Bureau of Medicine and Surgery. She is survived by a sister, Mrs. L. C. H. Eleder of 2201 Echodale Avenue, Baltimore, Md.

HORROCKS, Gilles E., Colonel, Medical Corps, U. S. Army, Retired, died December 12, 1959, at Brooke Army Hospital, Fort Sam Houston, Texas. His age was 62.

Doctor Horrocks was a native of Iowa. He held three degrees from the University of Missouri—B.J. (1921), A.B. (1923), B.S. (1925). He received his medical degree from Harvard Medical School in 1927. During World War I he served with the 147th Field Artillery in France in the grades of private and corporal and was wounded in action. His commissioned military service began in March 1929 as a first lieutenant in the Army Medical Corps. During World War II he again served in the European Theater and also the Asiatic-Pacific Theater. He was awarded the Purple Heart and the Bronze Service Medal. After his retirement in 1957 he took up residency in San Antonio, Texas.

Colonel Horrocks was a graduate of the Command and General Staff School at Leavenworth, Kansas. He had contributed several articles to *The Military Surgeon,* one of which was "Medical Practice in Zamboanga" which was based on his service there.

Surviving him is his wife who resides at 2118 West Lawnview Street, San Antonio, Texas. Interment was in the National Cemetery at Fort Sam Houston, Texas.

HULLINGHORST, Robert L., Colonel, Medical Corps, U. S. Army, died December 10, 1959, at the U. S. Naval Hospital, Bethesda, Maryland, at the age of 43. He had suffered a cerebral hemorrhage in september.

Doctor Hullinghorst received his medical degree from Louisiana State University School of Medicine at New Orleans in 1939 and was commissioned in the Army Medical Corps that year. He served part of his internship at Gorgas Hospital in the Panama Canal Zone. During World War II he served in Europe. Later he was assigned to Japan and was on that assignment when the Korean Conflict began. He had also served as Deputy Commandant of the Army Medical Service Graduate School, Walter Reed Army Medi cal Center, Washington, D.C. At the time of his death he was Deputy Commandant of the Surgeon General's Research and Development Command, Washington, D.C.

He was a member of the American Col-

lege of Pathologists, International Academy of Pathology, American Society of Clinical Pathologists, and the American Medical Association. He had contributed several articles to *Military Medicine.*

Colonel Hullinghorst is survived by his wife, 6808 Granby Street, Bethesda, Maryland, a son and two daughters.

McINTIRE, Ross T., Vice Admiral, Medical Corps, U. S. Navy, Retired, died December 8, 1959, at Chicago, Illinois. His age was 70.

Doctor McIntire was a native of Salem, Oregon. He received his medical degree from Williamette University, Oregon, and after graduation entered private practice. In 1917 he was commissioned in the Medical Corps of the U. S. Navy where he served until his retirement in 1946 at which time he was Surgeon General of the Navy and Chief of the Bureau of Medicine and Surgery, a position which he held since 1938. He was the first Surgeon General of the Navy to hold the rank of vice admiral (1944). From 1933 he was personal physician to the late President Franklin D. Roosevelt accompanying him on all trips. Admiral McIntire was with the President at the time of his death at Warm Springs, Georgia in 1945.

After his retirement Admiral McIntire became national director of the American Red Cross Blood Program. At the time of his death he was Executive Director of the International College of Surgeons.

He is survived by his widow who resides at 825 Adella Avenue, Coronado, California. Interment was in the Arlington National Cemetery.

McMILLAN, Mary, the first physical therapist in the U. S. Army, died October 24, 1959, in Boston, Massachusetts.

A native of Boston, she received her physical therapy education in Liverpool, England. At the request of Major General Gorgas who was then Surgeon General, in February 1918, almost a year after the United States had entered World War I, Miss McMillan reported to Walter Reed Army Hospital. There she established a physical therapy clinic. She was granted a leave of absence to go to Reed College, Portland, Oregon, where she conducted a course in physical therapy for 250 young women who were to serve in the Army. Following World War I, she was associated with Dr. Frank Granger at Harvard Medical School as co-director of one of the early courses in physical therapy. In 1932 she went to China where she became Chief Physical Therapist at Peiping Union Medical College, and established the first physical therapy training center under the auspices of the Rockefeller Foundation. From 1941 to 1943 she was a prisoner of war in a Japanese camp.

SANDIDGE, Roy P. Sr., Assistant Surgeon General, U.S. Public Health Service, Retired, died December 2, 1959, at Charlottesville, Virginia, at the age of 70.

During World War II Doctor Sandidge directed the Public Health Service's Hospital Division in Washington, D.C. He is survived by his wife, Jane G. (504 17th Street, N.W., Charlottesville, Va.), and a son, Doctor Roy P., Jr., of the National Institutes of Health, Bethesda, Md.

SHAW, Christopher C., Captain, Medical Corps, U. S. Navy, died December 5, 1959, in Philadelphia at the age of 58. He was the Senior Medical Officer in charge of Industrial Medicine at the U. S. Naval Base, Philadelphia.

Doctor Shaw was a native of Chichester, New York. He was a graduate of Yale University (1924). After teaching for two years he entered Johns Hopkins Medical School from which he later transferred to the University Of Maryland School of Medicine. That University granted him his medical degree in 1931. After a period of residencies and teaching he entered the private practice of medicine at Bellows Falls, Vermont. During the time of his private practice he was on the faculty of the University of Vermont School of Medicine. In July 1940 he was ordered to active duty with the U. S. Navy Medical Corps. He became an instructor in cardiology at the School of Aviation and Research, Pensacola, Florida.

In 1943 he joined the USS *Solomons* as Senior Medical Officer and Flight Surgeon. In December 1945 he was relieved from active duty and until 1948 was Educational Director of the American College of Physicians (two years) and Assistant Medical Director of Sharp & Dohme, Inc., Philadelphia. He was ordered to active duty again in January 1948 serving at the Naval Hospital in Philadelphia, and later that year in the Bureau of Medicine and Surgery in Washington.

Doctor Shaw was a contributor to medical literature. He won two awards for his contributions to the Association of Military Surgeons; the Major Louis Livingston Seaman prize in 1950, and the Sir Henry Wellcome Medal and Prize in 1954. He was a Diplomate of the National Boards of Medical Examiners; American Board of Internal Medicine; a Fellow of the American College of Physicians; a member of the American Medical Association, and of the Association of Military Surgeons of the United States.

He is survived by his wife, a daughter, and two sons. Interment was in Arlington National Cemetery.

WAUGH, Richey L., Medical Director, U.S. Public Health Service, Retired, died suddenly on November 24, 1959, at the age of 71. He was a graduate of the University of Minnesota School of Medicine (1915). He is survived by his wife who resides at 90 Brantwood Road, Arlington 74, Mass.

FIBROSIS OF LYMPHATIC VESSELS

A Report by LOTHAR WIRTH, M.D.

In an earlier communication[1] a report was made of two patients in whom hemorrhage into lymphatic vessels was observed. What at first appeared to be lymphangitis at the inner aspect of the upper arm, proved to be bleeding into a lymphatic vessel, as the characteristic red streak progressed downward and was eventually followed by a linear bluish green discoloration. Subsequently both patients developed difficulties when the lymphatic vessels became fibrotic.

That this latter event may have been the presenting problem from the very beginning became evident when two female patients came to see me because of difficulties in raising the arm above the shoulder level. When such height was attained a thin tense strand could be seen and palpated just beneath the surface of the skin of the inner aspect of the upper arm below the axilla. Further movement made this string so taut that full elevation of the arm was impossible. Both patients gave a history of having washed an automobile with a handbrush and in leaning over the roof of the car undoubtedly exerted pressure and friction against the involved area which must have caused compression, obliteration, and subsequent organization of the lymphatic vessel.

Active and passive motion and the application of heat restored function to the arm in both cases.

82 Broadway
Rensselaer, N.Y.

REFERENCE

[1] Wirth, L.: Hemorrhage into lymphatic vessels. The MILITARY SURGEON, **113**:39, July 1953.

NEW BOOKS

Books May Be Ordered Through The Association

Manual of Skin Diseases, Gordon C. Sauer, M.D., J. B. Lippincott Co., Philadelphia, Pa. Price $9.75.

Pyelonephritis, Fletcher H. Colby, M.D., Williams & Wilkins Co., Baltimore, Md. Price $7.50.

World Health Organization Monograph Series No. 42 *Water Supply For Rural Areas and Small Communities,* Edmund G. Wagner and J. N. Lanoix, Columbia University Press, New York, N.Y. Price $6.75.

War in the Modern World—A History of Land, Sea, and Air Warfare since the Renaissance. Theodore Ropp, Duke University Press, Durham, N.C. Price $10.00.

Fluid and Electrolyte Therapy: A Unified Approach in combination with the Metalyte Calculator, D. E. Pickering, M.D., and D.A. Fisher, M.D., Medical Research Foundation of Oregon, Inc., Portland, Ore. Price $11.00 (book and calculator).

Instructional Course Lectures, 1959 The American Academy of Orthopaedic Surgeons, Fred C. Reynolds, Editor, The C. V. Mosby Co., St. Louis, Mo. Price $16.00.

A Textbook of Surgical Physiology, R. Ainslie Jamieson, M.B., F.R.C.S. Ed. and Andrew W. Kay, M.D., Ch.M., F.R.C.S. Ed., F.R.F.P.S.G., The Williams & Wilkins Co., Baltimore, Md. Price $11.00.

Les Cataractes Congeitales, Jules Francois, Masson et Cie, Editeurs, Paris, France. Price 11,000 fr.

Tabulating Equipment and Army Medical Statistics, Brig. Gen. Albert G. Love, USA, Ret., Col. Eugene L. Hamilton, MSC, USAR and Ida Levine Hellman, M.Sc., Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. Price $2.00.

Kate: The Journal of a Confederate Nurse, Kate Cumming, Louisiana State University Press, Baton Rouge 3, La. Price $6.00.

Roentgenologic Diagnosis in Ophthalmology, Edward Hartmann, M.D., and Evelyn Gilles, M.D., J. B. Lippincott Co., Philadelphia, Pa. Price $15.00.

Antithrombotic Therapy, Paul W. Boyles, M.D., Grune & Stratton, New York, N.Y. Price $5.00.

Surgical Treatment of Bone and Joint Tuberculosis, Robert Roaf, M.A., M.Ch.Orth., F.R.C.S.Ed., F.R.C.S.Eng., W. H. Kirkaldy-Willis, M.A., M.D., B.Chir., F.R.C.S.Ed., and A. J. M. Cathro, M.C., Ch.C., The Williams & Wilkins Co., Baltimore, Md. Price $7.00.

Ocular Vertical Deviations and the Treatment of Nystagmus, J. Ringland Anderson, M.C., M.D., B.S., F.R.C.S.Ed., F.R.A.C.S., D.O.M.S., L. J. Lippincott Company, Philadelphia, Pa. Price $8.50.

Clinical Psychopathology, Prof. Kurt Schneider, University of Heidelberg, Germany, Grune & Stratton, New York, N.Y. Price $4.50.

Emotional Forces in the Family, Edited by Samuel Liebman, M.D., J. B. Lippincott Co., Philadelphia, Pa. Price $5.00.

Clinical Orthopaedics #15, The Hand—Part II, Anthony F. DePalma, Editor-in-Chief, J. B. Lippincott Co., Philadelphia, Pa. Price $7.50.

BOOK REVIEWS

A Practice of Thoracic Surgery. By A. L. d'Abreu, O.B.E., Ch.M., F.R.C.S., Birmingham, England. 619 pp., illustrated. The Williams and Wilkins Co., Baltimore, exclusive U. S. Agents. Price $19.00.

The second edition even surpasses the high excellency of the first. Its highest value is that it is a complete text basically of one man's thoughts, experiences, and teachings. This is rare in modern medical books and to have overcome the many difficulties in writing such a text is a high compliment to the author. It is a standard of the best in the realm of Thoracic Surgery (lungs, thoracic cage, and mediastinum) and a modern presentation of the rapidly changing field of cardiac surgery. It will be warmly received by thoracic surgeons and students in this country.

Brig. Gen. James H. Forsee, MC, USA

Leprosy in Theory and Practice. Edited by R. G. Cochrane, M.D., Ch.B., F.R.C.P., D.T.M. and H., Technical Medical Adviser, American Leprosy Missions, Inc., Adviser in Leprosy, Ministry of Health, London. 407 pages, illustrated. The Williams & Wilkins Co., Baltimore, exclusive U. S. agents. Price $15.00.

Leprosy, a disease which, in spite of improvement therapy, still affects millions, is of importance in military medicine because it may be endemic in areas where members of the Armed Forces have been or will be stationed. A modern textbook on the subject is therefore needed by medical officers.

Leprosy in Theory and Practice is the successor to the very useful *Practical Textbook of Leprosy* which was written in 1947 after the author had been busily engaged in leprosy work in South India for 20 years. The earlier book had been designed to give practicing physicians clear guidance in diagnosing and treating leprosy.

The title for the new book, *Leprosy in Theory and Practice,* is well chosen because, in addition to retaining the objectives of the first book, it presents the various facets of leprosy in a manner designed to challenge the investigative minds of workers in many specialized and basic medical disciplines. The new book was undertaken after the author, as the result of his advisory activities in Great Britain, United States and other countries, had, as a catalyst, activated scientists in many disciplines to give serious attention to leprosy.

In achieving the objectives of this new book, the author, now properly called "Editor," obtained the assistance of 23 collaborators of whom only about one-fourth are "career" leprosy workers. Others are basic scientists or specialists who have become interested in leprosy, usually due to persistent stimulation by the Editor.

The Editor, who wrote 9 of the 25 chapters, has not attempted to mold the writings of his associates to conform with his opinions. The fourteen chapters dealing with bacteriology, pathology, neurohistology, epidemiology, chemotherapy, radiology, orthopedics, etc., are separate and distinct articles in which the authors have been given free range to present their data and opinions. While this freedom necessarily causes some repetition, the end result is a very interesting textbook presented in a refreshing, non-dogmatic style.

The coverage of basic subjects is demonstrated in the handling of Mycobacteriology to which 4 chapters and a total of 46 pages are allotted different authors to discuss Bacteriology of Leprosy, the Submicroscopical Structure of *M. leprae,* the Acid-Fast Bacteria, and Certain Other Mycobacterial Infections.

In a book dealing with a subject historically characterized by many divergent opinions and fervent controversies, there must necessarily be many statements which will be challenged. It is to be expected that much disagreement will be elicited by the chapter on epidemiology which, based chiefly on data collected in the United States, refutes with documentation many oft repeated opinions such as leprosy is "feebly contagious," "children are most susceptible," and "adults rarely become infected."

The well bound volume is pleasingly printed on paper of high quality and is well illustrated by 189 figures. Each chapter carries a number of useful references. Technics in plastic surgery, examination, bacteriology, pathology, lepromin testing, etc., are handled in an appendix of 10 chapters.

This book should be in all medical libraries and on the shelf of all who are interested in any aspect of practice or research in leprosy.

Chapman H. Binford, M.D., USPHS

The Care of Minor Hand Injuries. By Adrian E. Flatt, M.D., State University of Iowa. 266 pp., illustrated. The C. V. Mosby Company, St. Louis. Price $9.50.

This compact volume has a value which exceeds many texts several times its size. Dr. Flatt has commented upon his choice of "minor" in the title. Otherwise exception to this should be made since there is so much discussed which is far from minor in scope. The opening portion of the book discusses

functional anatomy completely enough to satisfy the interest and need of more than the casual practitioner who treats hand injuries. One of the highlights of the section dealing with the general principles of care is the discussion of anesthesia in the treatment of the various hand injuries. Stress on local and regional anesthesia is made.

The Care of Specific Injuries is the meaty portion of this monograph, starting with the author's very practical classification. It proceeds diligently with treatment methods, using just the right amount of descriptive detail and pertinent line drawings and photographic illustrations to make the text understandable and interesting. Valuable plastic surgical instruction is given in the chapter on wounds of the skin. Injuries of the nail, pulp loss, amputations, tendon injuries, joint injuries, fractures, burns, infections, and miscellaneous injuries and wounds are similarly taken up with authority.

This is an important contribution to the field of trauma of the hand. A good bibliography is presented at the end of the book, followed by a complete index. Every admission room and operating room should have this volume close at hand for ready reference.

CDR. ROBERT H BROWN, MC, USN

DIABETIC MANUAL. 10th Edition. By Elliott P. Joslin, M.D., Sc.D. 304 pp., illustrated. Lea & Febiger, Philadelphia. Price $3.75.

This is the tenth edition of Dr. Joslin's classic manual for the diabetic patient. Written in a lucid and informal style, it presents an approach to diabetes mellitus and its treatment based upon personal clinical experience of over a half century with many thousands of patients. Included are new sections on the oral antidiabetic compounds now finding their way into more general use, as well as chapters covering every aspect of the patient's learning to live with his condition.

Dr. Joslin presents a rational scientific approach to the medical problems of the diabetic and a firm but kindly recognition of his emotional needs. Many physician readers may not agree with the practicality of weighed and calculated diets which Dr. Joslin recommends, nor with the practicality of maintaining diabetic patients with completely sugar-free urines and normal blood sugars. There is no mention in this book of the dangers of organic brain damage as a result of frequent or prolonged episodes of hypoglycemia, although the strict control of glycosuria is stressed to avoid the dreaded secondary complications of retinal, renal, and vascular degenerative disease.

The author's detailed advice on the general hygiene of the diabetic patient and his hopeful outlook commend this book, not only to the patient and his family, but also to all those physicians and nurses, concerned in the therapy of the diabetic.

MORTON EANET, M.D.

A MANUAL OF BANDAGING, STRAPPING, AND SPLINTING. 3rd Ed. By Augustus Thorndike, M.D., F.A.C.S. Lea & Febiger, Philadelphia. Price $2.75.

This is a paper back, pocket size book (5½ × 7¼), containing 124 illustrations, a bibliography, and an index. The illustrations are clear and the material is well presented. The book will be found particularly useful to medical students, nurses, and instructors in first-aid.

REB

THE NURSING AND MANAGEMENT OF SKIN DISEASES. By D. S. Wilkinson, M.D., M.R.C.P. 288 pp., illustrated. The Macmillan Company, New York. Price $5.75.

In this book the author has undertaken the task of instructing the school, visiting, and industrial nurses in the proper classification and nursing care of the commonly encountered diseases of the skin. At the same time he has striven to provide a handbook of dermatological diagnosis and treatment for the general practitioner. In both endeavors the author has achieved admirable success.

The reader is introduced to the skin as a complex organ in the first part of the book, and then advised on principles of management of skin diseases in general. The next two sections deal with the diagnosis and treatment of specific dermatological disorders. Finally, the author discusses special techniques used in both diagnosis and management, and presents an adequate formulary for dermatological use.

The book is written in a pleasant concise style and makes for easy reading. The author should withdraw his apology for being repetitious, for if his repeated warnings to use only simple preparations and avoid irritating the already inflamed skin are heeded, the practitioner will achieve most gratifying results.

CDR. R. W. JONES, MC, USN

A SYNOPSIS OF ANESTHESIA. 4th Ed. By J. Alfred Lee, M.R.C.S., D.A. 616 pp., 72 illustrations. The Williams & Wilkins Co., Baltimore, exclusive U. S. Agents. Price $6.50.

In this fourth edition a very complete revision has been carried out and the alterations and additions are so extensive, involving almost every page, that it is not possible to give them in detail here. Two new chapters have also been added: one on the phenothiazine derivatives, and the other on induced hypothermia. There is also a new section dealing with Fluothane in the chapter on inhalation agents.

The book is essentially a summary of current concepts and practices of anesthesia, with an especial emphasis on the point of view of the English anesthetist.

The material is presented in outline style and a

tremendous amount of information is condensed into a small area.

The section on regional anesthesia is rather extensive but has an inadequate number of illustrations.

This book is not designed to take the place of the larger textbooks of anesthesia. It is recommended as a ready source of reference for the resident in anesthesia and the full or part-time practicing anesthetist.

CAPT. JAMES G. KURFEES, MC, USN

SYNOPSIS OF EAR, NOSE, AND THROAT DISEASES. By Robert E. Ryan, M.D., William C. Thornell, M.D., and Hans von Leden, M.D. 383 pp., illustrated. The C. V. Mosby Company, St. Louis. Price $6.75.

Within the scope that this volume was intended, it serves its purpose. It is not for the specialist in otolaryngology, but rather for the non specialist physician, intern, and nurse.

Only the frequently seen pathology is discussed. Surgical procedures are not too detailed. Diseases of the ear, nose and paranasal sinuses, pharynx, larynx are first introduced with applied anatomy, then physiology, and then the examination is explained in detail. At the end of each topic there is an excellent summary.

The volume is well bound and has an adequate index. It is the type of book that the busy physician could find very useful for the salient facts are made clear and easy to find.

PHILIP H. SMITH, M.D.

THE MANAGEMENT OF ORAL DISEASE. 2nd Ed. Joseph L. Bernier, D.D.S., M.S., F.D.S., R.C.S. (Eng.). 875 pp., 1031 illustrations and 5 color plates. The C. V. Mosby Company, St. Louis. Price $15.00.

The main purpose of the second edition is to bring up to date this excellent teaching text and clinical guide in oral pathology by including recent advances. The author has accomplished this by only slightly expanding its over-all size by fifty pages, and increasing the number of illustrations with approximately fifty new illustrations.

No new chapters have been added, however, the new edition dwells in greater detail on the pathology of dental caries and periodontal disease, and extensive revisions have been made in the chapters dealing with the etiology of lymphoid lesions of the salivary glands. Of particular interest is information on techniques employed at the Institute for the preparation and sectioning of calcified tissues and comments on pulpal changes related to high speed instrumentation. The latter is based on original work by the author and Dr. M. J. Knapp.

The text and information contained therein is arranged in a logical and concise manner and presented in a simplified form. Each chapter is followed by an extensive bibliography so that the information contained therein may be augmented through literature review.

Although the book was primarily designed to be a student text, it also provides a superior reference manual for the clinician and oral pathologist.

MAJOR W. R. HUGHES, JR., USAF (DC)

HYPERTENSION. Edited by John H. Moyer, M.D. 91 contributors. 790 pp., illustrated. W. B. Saunders Company, Philadelphia and London. Price $14.00.

The inroads that modern physiology and pharmacology have made upon the morbidity and mortality of hypertension is one of the outstanding medical achievements of the past decade. This accomplishment appears to be all the more remarkable because essentially we are as ignorant today of the etiology of essential hypertension as we were 10 years ago.

The exposition of this conquest is more admirably delineated in this book edited by Dr. Moyer. It is the recording of the first Hahnemann Symposium of Hypertension held in Philadelphia in December 1958. Dr. Moyer should take justifiable pride in the planning and execution of this marvelous symposium for which he assembled an all American team, abetted by some expert British and Israeli authorities to pool their vast experiences and share the lessons gained therefrom.

All aspects of hypertension—medical, surgical, neurological, obstetrical, urological, theoretical, as well as clinical, are covered in a most orderly and the lucid presentation. Here the clinician will find answers to any and every phase of the subject as we know it today. The graphs and charts employed are most instructive and sensibly oriented to the text.

All of the newer classes of drugs are fully covered as to indications, contraindications, dosage, and complications, and several schemes of therapy are included that afford the flexibility required to manage the many challenges presented by hypertensive patients—the decline of sympathectomy is mirrored succinctly in Dr. Smithwick's own graphs. With improved drugs in the future plus further basic studies this decline should continue.

This book will prove most valuable reading to anyone interested in hypertension in any and all of its phases. Dr. Moyer and his associates have done an outstanding job and merit the thanks of all hypertensive patients, because the knowledge disseminated by the publication of these sessions will enable their physicians to treat their disease upon a more rational and effective basis.

JULIAN LOVE, M.D.